

117TH CONGRESS
1ST SESSION

H. R. 2639

To establish forest conservation practices through management, reforestation, and utilization which lead to the sequestration of greenhouse gases, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

APRIL 19, 2021

Mr. WESTERMAN (for himself, Mr. MCCARTHY, Mr. SCHRADER, Mr. AMODEI, Mr. ARMSTRONG, Mr. BACON, Mr. BAIRD, Mr. BARR, Mr. BENTZ, Mr. BISHOP of Georgia, Mr. BURCHETT, Mr. CALVERT, Mr. CARL, Mr. CARTER of Georgia, Ms. CHENEY, Mr. COLE, Mr. CRAWFORD, Mr. CRENSHAW, Mr. CUELLAR, Mr. CURTIS, Mr. RODNEY DAVIS of Illinois, Mrs. FISCHBACH, Mr. FORTENBERRY, Ms. FOXX, Mr. FULCHER, Mr. GONZALEZ of Ohio, Miss GONZÁLEZ-COLÓN, Mr. GOSAR, Ms. GRANGER, Mr. GRAVES of Louisiana, Ms. HERRELL, Mr. HIGGINS of Louisiana, Mr. HILL, Mr. JOHNSON of South Dakota, Mr. JOYCE of Ohio, Mr. KELLY of Mississippi, Mrs. KIM of California, Mr. LAMBORN, Mr. LATTA, Mrs. LESKO, Mr. LUCAS, Ms. MACE, Ms. MALLIOTAKIS, Mr. MANN, Mr. MCCAUL, Mrs. RODGERS of Washington, Mr. MELJER, Mr. MEUSER, Mrs. MILLER-MEEKS, Mr. MOORE of Utah, Mr. NEWHOUSE, Mr. NUNES, Mr. OBERNOLTE, Mr. OWENS, Mrs. RADEWAGEN, Mr. ROGERS of Alabama, Mr. ROUZER, Mr. AUSTIN SCOTT of Georgia, Mr. SIMPSON, Mr. STAUBER, Ms. STEFANIK, Mr. STEWART, Mr. STIVERS, Mr. THOMPSON of Pennsylvania, Mr. TIFFANY, Mr. VALADAO, Mr. WEBER of Texas, Mr. WEBSTER of Florida, Mr. WILSON of South Carolina, Mr. WITTMAN, Mr. WOMACK, Mr. YOUNG, and Mr. RESCHENTHALER) introduced the following bill; which was referred to the Committee on Agriculture, and in addition to the Committees on Foreign Affairs, Natural Resources, Ways and Means, Science, Space, and Technology, and Education and Labor, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To establish forest conservation practices through management, reforestation, and utilization which lead to the sequestration of greenhouse gases, 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; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
 5 “Trillion Trees Act”.

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

Sec. 1. Short title; table of contents.

Sec. 2. Definitions.

TITLE I—CARBON SEQUESTRATION THROUGH REFORESTATION
 ACTIVITIES

Subtitle A—Reforestation Goals

Sec. 101. National forest carbon stock targets.

Sec. 102. Trillion Trees Task Force.

Sec. 103. Philanthropic Reforestation Advisory Council.

Sec. 104. Trillion Trees Challenge Fund.

Sec. 105. Renewable resource assessment update and lifecycle analysis.

Sec. 106. Forest inventory and analysis.

Sec. 107. National Forest Foundation activities.

Subtitle B—Regeneration

Sec. 111. Reforestation programs.

Sec. 112. Reforestation trust fund.

Sec. 113. Solving shortages for seedlings.

Sec. 114. Healthy forest reserve program.

Sec. 115. Forestry education and workforce development grant program.

Sec. 116. Civilian Conservation Centers reforestation activities.

Sec. 117. Forest technology enhancements for conservation and habitat improvement.

Subtitle C—Urban Forests

Sec. 121. Urban and community forestry assistance.

Sec. 122. Civilian Conservation Center urban forestry demonstration program.

Sec. 123. Memorandum of understanding to coordinate urban forestry programs.

Subtitle D—International Forests

Sec. 131. Sense of Congress.
 Sec. 132. International Forest Foundation.
 Sec. 133. International engagement.
 Sec. 134. Global climate change program.
 Sec. 135. International forestry cooperation.
 Sec. 136. Modifications to authorities relating to tropical forests.

TITLE II—CARBON SEQUESTRATION THROUGH IMPROVED
 FOREST MANAGEMENT ACTIVITIES

Sec. 201. Land use planning; supplements to programmatic environmental impact statements.
 Sec. 202. Forest carbon stock on State and private forests.
 Sec. 203. Good neighbor authority.
 Sec. 204. Research and development programs.

TITLE III—MARKET INCENTIVES FOR CARBON SEQUESTRATION

Sec. 301. Biochar demonstration project and grant program.
 Sec. 302. Sustainable building and residence credit.
 Sec. 303. Clarification of research and development program for cellulosic biochemical and bioplastics.
 Sec. 304. Tribal and Alaska Native biomass demonstration project extension.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) **AFFORESTATION.**—The term
 4 “afforestation” means a project or activity to estab-
 5 lish a forest or stand of native trees in an ecosystem
 6 where there is not a forest or tree cover, consistent
 7 with the best available science.

8 (2) **FOREST CARBON FLUX.**—The term “forest
 9 carbon flux” means the net annual change in carbon
 10 residing within forest carbon pools and in forest car-
 11 bon stock.

12 (3) **FOREST CARBON POOLS.**—The term “forest
 13 carbon pools” means the individual, nonoverlapping

1 categories where forest carbon resides and in-
2 cludes—

3 (A) aboveground biomass, belowground
4 biomass, dead wood, litter, and mineral and or-
5 ganic soils in forest ecosystems, woodlands, and
6 trees outside forests including urban trees; and

7 (B) harvested wood products (in use or in
8 solid waste disposal sites).

9 (4) FOREST CARBON STOCK.—The term “forest
10 carbon stock” means the absolute quantity of carbon
11 stored within all forest carbon pools.

12 (5) FOREST PLAN.—The term “forest plan”
13 means—

14 (A) a land use plan prepared by the Bu-
15 reau of Land Management for public lands pur-
16 suant to section 202 of the Federal Land Policy
17 and Management Act of 1976 (43 U.S.C.
18 1712); or

19 (B) a land and resource management plan
20 prepared by the Forest Service for a unit of the
21 National Forest System pursuant to section 6
22 of the Forest and Rangeland Renewable Re-
23 sources Planning Act of 1974 (16 U.S.C.
24 1604).

1 (6) FOREST MANAGEMENT ACTIVITY.—The
2 term “forest management activity” means a project
3 or activity carried out by the Secretary concerned on
4 National Forest System lands or public lands con-
5 sistent with the forest plan covering the lands.

6 (7) NATIONAL FOREST SYSTEM.—The term
7 “National Forest System” has the meaning given
8 that term in section 11(a) of the Forest and Range-
9 land Renewable Resources Planning Act of 1974 (16
10 U.S.C. 1609(a)).

11 (8) PUBLIC LANDS.—The term “public lands”
12 has the meaning given that term in section 103 of
13 the Federal Land Policy and Management Act of
14 1976 (43 U.S.C. 1702).

15 (9) REFORESTATION.—The term “reforest-
16 ation” means the act of renewing tree cover by es-
17 tablishing young trees through natural regeneration,
18 natural regeneration with site preparation, or plant-
19 ing.

20 (10) SECRETARY.—The term “Secretary”
21 means the Secretary of Agriculture.

22 (11) SECRETARY CONCERNED.—The term
23 “Secretary concerned” means—

24 (A) the Secretary of Agriculture, with re-
25 spect to National Forest System lands; and

1 (B) the Secretary of the Interior, with re-
2 spect to public lands.

3 (12) SECRETARIES.—The term “Secretaries”
4 means the Secretary of Agriculture and the Sec-
5 retary of Interior.

6 **TITLE I—CARBON SEQUESTRA-**
7 **TION THROUGH REFOREST-**
8 **ATION ACTIVITIES**

9 **Subtitle A—Reforestation Goals**

10 **SEC. 101. NATIONAL FOREST CARBON STOCK TARGETS.**

11 (a) IN GENERAL.—Not later than 2 years after the
12 date of the enactment of this Act, the Secretary shall set
13 targets for increased forest carbon stock for the purposes
14 of sequestering and storing carbon while meeting other re-
15 source management objectives. Such targets shall—

16 (1) be based on the best available scientific in-
17 formation;

18 (2) consider both natural and artificial regen-
19 eration, with an emphasis on the regeneration of na-
20 tive species;

21 (3) be established at levels, consistent with
22 other statutory management purposes on Federal
23 lands, which represent the optimal feasible and sus-
24 tainable increase in the forest carbon stock private,
25 State, Tribal, and Federal landowners can achieve

1 by January 1, 2030, and every 10 years thereafter
2 through January 1, 2100;

3 (4) be informed by the report provided by the
4 Trillion Trees Task Force established in section 102;

5 (5) incorporate data from the forest inventory
6 and analysis program under section 3(e) of the For-
7 est and Rangeland Renewable Resources Research
8 Act of 1978 (16 U.S.C. 1642(e)) and other applica-
9 ble Federal agency data;

10 (6) be consistent with multiple use and sus-
11 tained yield requirements, policies, and objectives on
12 National Forest, State, Tribal, and other public or
13 private land;

14 (7) be consistent with other benefits related to
15 forest function and health including soil health and
16 productivity, wildlife habitat and biodiversity, im-
17 proved air and water quality, job creation, outdoor
18 recreation, and forest products and byproducts;

19 (8) be established at levels that account for—

20 (A) long-term and short-term carbon se-
21 questration and storage;

22 (B) forest carbon flux; and

23 (C) assessments of existing forested acres,
24 considering variations in landscape;

1 (9) incorporate input from State, Tribal, and
2 local stakeholders and members of the public; and

3 (10) be published in the Federal Register, to-
4 gether with a statement of the basis and justification
5 for such targets.

6 (b) NATURAL REGENERATION.—In this subsection,
7 the term “natural regeneration” means the establishment
8 of a tree or tree age class from natural seedling, sprouting,
9 or suckering, in accordance with the management objec-
10 tives of an applicable forest plan.

11 (c) CLARIFICATION.—Nothing in this section shall be
12 construed to establish any requirements with respect to
13 private landowners.

14 **SEC. 102. TRILLION TREES TASK FORCE.**

15 (a) ESTABLISHMENT.—Not later than 6 months after
16 the date of the enactment of this section, the Secretary
17 shall establish the Trillion Trees Task Force (in this sec-
18 tion referred to as the “task force”) to assist the Secretary
19 with meeting the targets and purposes established under
20 section 101(a).

21 (b) DUTIES OF THE TASK FORCE.—

22 (1) REPORT.—Not later than 1 year after the
23 date the task force is established under subsection
24 (a), the task force shall submit to the Secretary a
25 report that includes—

1 (A) recommendations for the national for-
2 est carbon stock targets established under sec-
3 tion 101;

4 (B) plant growth targets, including long-
5 term growth targets, required to achieve the na-
6 tional forest carbon stock targets established
7 under section 101, taking into account—

8 (i) forest carbon flux;

9 (ii) multiple use and sustained yield
10 requirements, policies, and objectives;

11 (iii) natural regeneration;

12 (iv) adverse natural and anthropo-
13 genic disturbances; and

14 (v) other factors impacting domestic
15 forestlands; and

16 (C) program and policy recommendations
17 designed to achieve the national forest carbon
18 stock targets established under section 101,
19 while—

20 (i) still maintaining sustainable levels
21 of board feet harvested from public lands;

22 (ii) promoting forest products mar-
23 kets, including for new and innovative for-
24 est products and byproducts; and

1 (iii) improving the natural regenera-
2 tion of public and private forests (with an
3 emphasis on the regeneration of native spe-
4 cies) through active forest management.

5 (2) OVERSIGHT.—Following the submission of
6 the report described in paragraph (1), the task force
7 shall provide continued oversight of the implementa-
8 tion of the national forest carbon stock targets, and
9 provide the Secretary with—

10 (A) yearly reports on the progress made
11 towards achieving the national forest carbon
12 stock targets established under section 101; and

13 (B) ongoing program and policy rec-
14 ommendations designed to achieve the national
15 forest carbon stock targets established under
16 section 101.

17 (3) REPORTS TO CONGRESS.—The task force
18 shall—

19 (A) submit to Congress a copy of the re-
20 port under paragraph (1); and

21 (B) not later than 2 years after the report
22 under paragraph (1) is submitted to the Sec-
23 retary and Congress, and every 5 years there-
24 after, submit a report to Congress on the imple-

1 mentation of, and progress towards meeting,
2 the targets set under section 101.

3 (c) MEMBERSHIP.—

4 (1) APPOINTMENT.—The task force shall con-
5 sist of 15 ex officio members and 15 discretionary
6 members.

7 (A) EX OFFICIO MEMBERS.—The Presi-
8 dent shall appoint 15 representatives from the
9 executive branch.

10 (B) DISCRETIONARY MEMBERS.—The Sec-
11 retary shall appoint 1 discretionary member
12 from each of the following:

13 (i) A State land management agency.

14 (ii) A private forest landowner with
15 total land holdings of greater than
16 1,000,000 acres.

17 (iii) A private forest landowner with
18 total land holdings of less than 1,000,000
19 acres.

20 (iv) A family forest landowner.

21 (v) A pulp or paper manufacturer
22 which receives wood fiber directly or indi-
23 rectly from Federal timber for a portion of
24 their fiber supply.

1 (vi) A sawmill or engineered wood
2 producer which relies on the sale of Fed-
3 eral timber for at least 25 percent of their
4 fiber supply.

5 (vii) An energy company, cooperative,
6 pellet fuel producer, or utility which pro-
7 vides customers with energy at least par-
8 tially derived from the combustion of wood
9 biomass.

10 (viii) A land conservation nonprofit
11 with previous experience in collaborative
12 forestland restoration projects greater than
13 100,000 acres.

14 (ix) A Tribal land management agen-
15 cy or resource management organization
16 with previous experience managing Tribal
17 timberland.

18 (x) A wildlife conservation nonprofit
19 with previous experience in collaborative
20 forestland restoration projects greater than
21 100,000 acres.

22 (xi) An entity with experience in wild-
23 life habitat restoration projects less than
24 100,000 acres.

1 (xii) An urban or community resource
2 conservation organization, with previous
3 experience in urban and community refo-
4 restation projects.

5 (xiii) An organization with previous
6 experience in projects of any size that in-
7 crease public access or outdoor recreation
8 opportunities on National Forest System
9 lands.

10 (xiv) A company or organization with
11 experience in sustainable buildings or mass
12 timber construction.

13 (xv) An academic or scientific institu-
14 tion with experience researching forest car-
15 bon stock in domestic forests.

16 (2) DISCRETIONARY MEMBER TERMS.—

17 (A) APPOINTMENT AND REMOVAL.—Each
18 discretionary member appointed to the task
19 force under paragraph (1)(B) may be appointed
20 and removed at the discretion of the Secretary.

21 (B) VACANCY.—A discretionary member
22 that is removed under subparagraph (A) shall
23 be replaced not later than 6 months after such
24 removal.

25 (3) QUORUM.—

1 (A) IN GENERAL.—A quorum shall consist
2 of 10 ex officio members and 10 discretionary
3 members of the task force.

4 (B) DECISIONS.—Decisions of the task
5 force shall be made by majority vote, a quorum
6 being present.

7 (4) PRESERVATION OF PUBLIC ADVISORY STA-
8 TUS.—No individual may be appointed to the task
9 force as a discretionary member under paragraph
10 (1)(B) while serving as an officer or employee of the
11 Federal Government.

12 (5) PAY AND EXPENSES.—

13 (A) COMPENSATION.—

14 (i) FEDERAL EMPLOYEE MEMBERS.—
15 All members of the task force who are offi-
16 cers or employees of the United States
17 shall serve without compensation in addi-
18 tion to that received for their services as
19 officers or employees of the United States.

20 (ii) NON-FEDERAL EMPLOYEE MEM-
21 BERS.—All members of the task force not
22 described in clause (i) shall serve without
23 compensation.

24 (B) REIMBURSEMENT.—A member of the
25 task force may be reimbursed for travel and

1 lodging incurred while attending a meeting of
2 the task force or any other meeting of members
3 approved for reimbursement by the task force
4 in the same amounts and under the same condi-
5 tions as Federal employees under section 5703
6 of title 5, United States Code.

7 (C) EXPENSES.—The expenses of the task
8 force that the Secretary determines to be rea-
9 sonable and appropriate shall be paid by the
10 Secretary.

11 (6) ADMINISTRATIVE SUPPORT, TECHNICAL
12 SERVICES, AND STAFF SUPPORT.—The Secretary
13 shall make personnel of the Department of Agri-
14 culture available to the task force for administrative
15 support, technical services, and staff support that
16 the Secretary determines necessary to carry out this
17 section.

18 (d) FEDERAL ADVISORY COMMITTEE ACT.—The
19 Federal Advisory Committee Act (5 U.S.C. App.) shall not
20 apply to the task force.

21 **SEC. 103. PHILANTHROPIC REFORESTATION ADVISORY**
22 **COUNCIL.**

23 (a) ESTABLISHMENT.—There is hereby established
24 the Philanthropic Reforestation Advisory Council (in this

1 section referred to as the “Advisory Council”) to advise
2 the Secretary on—

- 3 (1) increasing private charitable investment in
4 reforestation and afforestation activities; and
5 (2) tracking private charitable reforestation and
6 afforestation pledges and metrics.

7 (b) DUTIES OF THE ADVISORY COUNCIL.—

8 (1) REPORT.—Not later than 1 year after the
9 date of the enactment of this section, the Advisory
10 Council shall submit to the Secretary a report that
11 includes recommendations for—

12 (A) increasing and encouraging private
13 charitable investments in reforestation and
14 afforestation activities; and

15 (B) developing a platform to track private
16 charitable tree planting pledges and metrics.

17 (2) CONSULTATION.—The Secretary shall con-
18 sult with the Advisory Council when developing the
19 list of projects to be funded from the Trillion Trees
20 Challenge Fund established under section 104.

21 (3) REPORTS TO CONGRESS.—The Advisory
22 Council shall annually submit to Congress—

23 (A) a copy of the report under paragraph
24 (1); and

1 (B) a list of projects the Advisory Council
2 recommended be funded under paragraph (2)
3 and whether or not those projects were funded.

4 (c) MEMBERSHIP.—

5 (1) APPOINTMENT.—The Advisory Council shall
6 consist of 2 ex officio members and 15 discretionary
7 members.

8 (A) EX OFFICIO MEMBERS.—The ex officio
9 members of the Advisory Council, or their des-
10 ignees, are—

11 (i) the Secretary of Agriculture; and

12 (ii) the Secretary of the Interior.

13 (B) DISCRETIONARY MEMBERS.—The Sec-
14 retary shall appoint discretionary members
15 from each of the following:

16 (i) One from each of not more than 5
17 companies or corporations that have made
18 public charitable tree planting pledges.

19 (ii) One from each of not more than
20 5 philanthropic organizations with experi-
21 ence in financing reforestation and
22 afforestation activities.

23 (iii) One from each of not more than
24 5 non-profit organizations with experience
25 in reforestation and afforestation activities.

1 (2) DISCRETIONARY MEMBER TERMS.—Each
2 discretionary member appointed to the Advisory
3 Council under paragraph (1)(B) may be appointed
4 and removed at the discretion of the Secretary.

5 (3) QUORUM.—

6 (A) IN GENERAL.—A quorum shall consist
7 of 12 members of the Advisory Council.

8 (B) DECISIONS.—Decisions of the Advi-
9 sory Council shall be made by majority vote, a
10 quorum being present.

11 (4) PRESERVATION OF PUBLIC ADVISORY STA-
12 TUS.—No individual may be appointed to the Advi-
13 sory Council as a discretionary member under para-
14 graph (1)(B) while serving as an officer or employee
15 of the Federal Government.

16 (5) PAY AND EXPENSES.—

17 (A) COMPENSATION.—

18 (i) FEDERAL EMPLOYEE MEMBERS.—

19 All members of the Advisory Council who
20 are officers or employees of the United
21 States shall serve without compensation in
22 addition to that received for their services
23 as officers or employees of the United
24 States.

1 (ii) NON-FEDERAL EMPLOYEE MEM-
2 BERS.—All members of the Advisory Coun-
3 cil not described in clause (i) shall serve
4 without compensation.

5 (B) REIMBURSEMENT.—A member of the
6 Advisory Council may be reimbursed for travel
7 and lodging incurred while attending a meeting
8 of the Advisory Council or any other meeting of
9 members approved for reimbursement by the
10 Advisory Council in the same amounts and
11 under the same conditions as Federal employees
12 under section 5703 of title 5, United States
13 Code.

14 (C) EXPENSES.—The expenses of the Ad-
15 visory Council that the Secretary determines to
16 be reasonable and appropriate shall be paid by
17 the Secretary.

18 (6) ADMINISTRATIVE SUPPORT, TECHNICAL
19 SERVICES, AND STAFF SUPPORT.—The Secretary
20 shall make personnel of the Department of Agri-
21 culture available to the Advisory Council for admin-
22 istrative support, technical services, and staff sup-
23 port that the Secretary determines necessary to
24 carry out this section.

1 (7) FEDERAL ADVISORY COMMITTEE ACT.—The
2 Federal Advisory Committee Act (5 U.S.C. App.)
3 shall not apply to Advisory Council.

4 **SEC. 104. TRILLION TREES CHALLENGE FUND.**

5 (a) ESTABLISHMENT.—

6 (1) IN GENERAL.—There is established in the
7 Treasury a fund to be known as the “Trillion Trees
8 Challenge Fund”.

9 (2) DEPOSITS.—For each of fiscal years 2021
10 through 2030, there is appropriated, out of any
11 money in the Treasury not otherwise appropriated,
12 \$10,000,000, which shall be deposited into the Tril-
13 lion Trees Challenge Fund and remain available
14 until expended.

15 (3) USE OF FUNDS.—Amounts deposited into
16 the Trillion Trees Challenge Fund—

17 (A) shall be used by the Secretary to make
18 grants, in consultation with the Philanthropic
19 Reforestation Advisory Council, to eligible enti-
20 ties to carry out eligible projects described in
21 subsection (b)(1); and

22 (B) may only be used if matched by the el-
23 igible entity carrying out the eligible project, on
24 at least a 1-to-1 basis, by non-Federal funds.

25 (4) PUBLIC DONATIONS.—

1 (A) IN GENERAL.—For purposes of mak-
2 ing grants under this section, the Secretary
3 may accept cash or in-kind donations.

4 (B) CREDITS TO FUND.—Any cash dona-
5 tion accepted pursuant to subparagraph (A)
6 shall be credited to, and form a part of, the
7 Fund.

8 (b) ELIGIBLE PROJECTS.—

9 (1) IN GENERAL.—An eligible project described
10 in this paragraph is an activity carried out by an eli-
11 gible entity related to reforestation or conserving,
12 managing, maintaining, and monitoring trees on
13 State, Tribal, municipal, or private lands for the
14 purpose of increasing forest carbon stock.

15 (2) LIST.—The Secretary shall—

16 (A) annually develop a list of eligible
17 projects to be funded from the Trillion Trees
18 Challenge Fund, in consultation with the Phil-
19 anthropic Reforestation Advisory Council; and

20 (B) submit the list developed pursuant to
21 subparagraph (A) to—

22 (i) the Committees on Agriculture,
23 Nutrition, and Forestry and Energy and
24 Natural Resources of the Senate; and

1 (ii) the Committees on Agriculture
2 and Natural Resources of the House of
3 Representatives; and

4 (C) publish such list annually in the Fed-
5 eral Register.

6 (3) UPDATES.—The Secretary may add an eli-
7 gible project to the list described in subparagraph
8 (A) of paragraph (2) and submit such addition in
9 accordance with subparagraph (B) of such para-
10 graph.

11 (4) PROPOSALS.—To be eligible to receive fund-
12 ing under this section, an eligible entity shall submit
13 to the Secretary a proposal at such time, in such
14 manner, and containing such information as the Sec-
15 retary may require.

16 (c) SUMMARY TO CONGRESS.—The Secretary shall
17 include in the budget materials submitted to Congress in
18 support of the President’s annual budget request (sub-
19 mitted to Congress pursuant to section 1105 of title 31,
20 United States Code) for each fiscal year a summary of
21 the status and funding of eligible projects under this sec-
22 tion.

23 (d) DEFINITIONS.—In this section—

24 (1) ELIGIBLE ENTITY.—The term “eligible enti-
25 ty” means—

- 1 (A) a State, local, or Tribal government;
- 2 (B) a non-profit organization or edu-
- 3 cational institution;
- 4 (C) an individual; or
- 5 (D) other non-Federal entities, as deter-
- 6 mined by the Secretary.

7 (2) PHILANTHROPIC REFORESTATION ADVISORY

8 COUNCIL.—The term “Philanthropic Reforestation

9 Advisory Council” means to the Advisory Council es-

10 tablished under section 103 of the Trillion Trees

11 Act.

12 **SEC. 105. RENEWABLE RESOURCE ASSESSMENT UPDATE**

13 **AND LIFECYCLE ANALYSIS.**

14 (a) RENEWABLE RESOURCE ASSESSMENT.—Section

15 3 of the Forest and Rangeland Renewable Resources Plan-

16 ning Act of 1974 (16 U.S.C. 1601) is amended—

17 (1) in subsection (a)—

18 (A) in paragraph (5), by striking “and” at

19 the end;

20 (B) by striking paragraph (6) and insert-

21 ing the following:

22 “(6) an analysis of the rural and urban forestry

23 opportunities to mitigate the buildup of atmospheric

24 carbon, reduce the risk of global climate change,

25 capture and store atmospheric carbon, and optimize

1 forest carbon stock (as defined in section 2 of the
2 Trillion Trees Act) in domestic forests; and”;

3 (C) by adding at the end the following:

4 “(7) an analysis of the forest carbon stock (as
5 defined in section 2 of the Trillion Trees Act) poten-
6 tial of domestic forests based upon the lifecycle anal-
7 ysis established under section 105(c) of the Trillion
8 Trees Act.”;

9 (2) in subsection (c)—

10 (A) in paragraph (2), by striking “and” at
11 the end;

12 (B) in paragraph (3), by striking the pe-
13 riod at the end and inserting “; and”; and

14 (C) by adding at the end the following:

15 “(4) the potential to increase forest carbon
16 stock (as defined in section 2 of the Trillion Trees
17 Act) through the utilization of harvested wood prod-
18 ucts, including recommendations to Congress for ac-
19 tions which would lead to increased forest carbon
20 stock through the utilization of such materials.”;
21 and

22 (3) in the first subsection (d), by inserting “and
23 other stakeholders” after “agencies”.

1 (b) RENEWABLE RESOURCE PROGRAM.—Section 4 of
2 the Forest and Rangeland Renewable Resources Planning
3 Act of 1974 (16 U.S.C. 1602) is amended—

4 (1) in the first sentence—

5 (A) by inserting “Nation’s forests, includ-
6 ing the” before “National Forest System”;

7 (B) by inserting “and Congress” after
8 “transmitted to the President”; and

9 (C) by inserting “and development pro-
10 grams” after “for research”;

11 (2) by striking the “The Program shall include,
12 but not be limited to” and inserting “The Program
13 shall be prepared and transmitted to the President
14 and Congress not later than 2 years after the date
15 of the enactment of the Trillion Trees Act and every
16 2 years thereafter, and shall include, but not be lim-
17 ited to”;

18 (3) by amending paragraph (1) to read as fol-
19 lows:

20 “(1) an inventory of specific investment needs
21 and opportunities for both public and private pro-
22 gram investments that—

23 “(A) differentiates between—

1 “(i) activities which are of a capital
2 nature and those which are of an oper-
3 ational nature; and

4 “(ii) investments required to support
5 existing policies and programs and those
6 required to create and implement new poli-
7 cies and programs; and

8 “(B) identifies—

9 “(i) Federal and State policies that, if
10 left unchanged in the succeeding 50 years,
11 would create undesirable impacts on for-
12 ests and communities; and

13 “(ii) alternatives to the policies de-
14 scribed in clause (i) that if implemented in
15 the 10 succeeding years would mitigate
16 such undesirable impacts;”;

17 (4) in paragraph (2)—

18 (A) by inserting “and policy options” after
19 “Program outputs”;

20 (B) by inserting “or State governments”
21 after “Federal Government”;

22 (5) in paragraph (3), by inserting “and imple-
23 mentation of identified policy options” after “Pro-
24 gram opportunities”;

25 (6) in paragraph (5)—

1 (A) in the matter preceding subparagraph
2 (A), by inserting “and policy options” before
3 “which”;

4 (B) in subparagraph (B), by inserting
5 “and services” after “products”;

6 (C) in subparagraph (D), by striking
7 “state national goals” and inserting “State na-
8 tional goals that the policy options are intended
9 to achieve and”;

10 (D) in subparagraph (E), by striking
11 “and” at the end;

12 (E) in subparagraph (F)—

13 (i) by inserting “the health and resil-
14 iency of forests, forest carbon stock (as de-
15 fined in section 2 of the Trillion Trees
16 Act), and” before “forest and rangeland” ;
17 and

18 (ii) by striking the period and insert-
19 ing “; and”; and

20 (F) by adding at the end the following:

21 “(G) account for the effects of trees in
22 urban and community areas in addition to for-
23 ests in rural areas.”.

24 (c) LIFECYCLE ANALYSIS.—

1 (1) LIFECYCLE STORAGE MODEL.—As a part of
2 the assessment established under section 3 of the
3 Forest and Rangeland Renewable Planning Act of
4 1974 (16 U.S.C. 1601) the Secretary shall develop
5 interdisciplinary computational models using all
6 available data to—

7 (A) evaluate the lifecycle forest carbon
8 stock potential associated with domestic
9 forestland; and

10 (B) provide projections, scenario planning,
11 and policy options associated with such models.

12 (2) CONSIDERATIONS.—In developing the model
13 under paragraph (1), the Secretary shall consider—

14 (A) the best available science;

15 (B) data collected through the forest in-
16 ventory and analysis program under section
17 3(e) of the Forest and Rangeland Renewable
18 Resources Research Act of 1978 (16 U.S.C.
19 1642(e));

20 (C) forest carbon stock and the rate of car-
21 bon storage and sequestration in forest carbon
22 pools;

23 (D) the net carbon storage and sequestra-
24 tion of active forest management;

1 (E) the rate of carbon storage and seques-
2 tration in varying forests based on the climate
3 the forest is located in, the average age of
4 stands, and rate of tree mortality;

5 (F) the net amount of carbon released
6 through catastrophic wildfire, disease and insect
7 infestations, and other disturbances that result
8 in tree mortality;

9 (G) the net carbon stored and sequestered
10 through the manufacture of harvested wood
11 products;

12 (H) the net carbon stored and sequestered
13 through a sustainable cycle of harvest and re-
14 generation;

15 (I) forest carbon flux; and

16 (J) other factors as determined by the Sec-
17 retary.

18 (3) VALIDATION PROGRAM.—

19 (A) IN GENERAL.—The Secretary shall
20 carry out a program for validation and inde-
21 pendent testing of the lifecycle models devel-
22 oped under paragraph (1).

23 (B) REQUIREMENTS.—In carrying out the
24 validation program under subparagraph (A),
25 the Secretary shall—

1 (i) regularly perform retrospective as-
2 sessments comparing model predictions to
3 field data on the carbon stored in forests;
4 and

5 (ii) require independent evaluation
6 and comparison of lifecycle models devel-
7 oped under paragraph (1) against existing
8 models, and enable empirical testing of
9 hypotheses regarding the net effects on
10 land and atmospheric carbon stocks and
11 other greenhouse gas impacts.

12 (4) REPORT.—Not later than 2 years after the
13 date of enactment of this Act, and every 2 years
14 thereafter, the Secretary shall submit to Congress a
15 report that includes—

16 (A) the findings of the analysis conducted
17 using the model developed under paragraph (1);

18 (B) recent trends and current forest car-
19 bon stock, forest carbon pools, and forest car-
20 bon flux as well as projections of forest carbon
21 stock, forest carbon pools, and forest carbon
22 flux for the succeeding 50 years; and

23 (C) scenario planning for Federal, State,
24 Tribal, local, and private landowners that ana-

1 lyzes different policy options and their associ-
2 ated effects on lifecycle forest carbon stock.

3 **SEC. 106. FOREST INVENTORY AND ANALYSIS.**

4 (a) 5-YEAR REPORTS.—Section 3(e)(3) of the Forest
5 and Rangeland Renewable Resources Research Act of
6 1978 (16 U.S.C. 1642(e)(3)) is amended—

7 (1) in subparagraph (B), by striking “and” at
8 the end;

9 (2) in subparagraph (C), by inserting “, forest
10 carbon,” after “forest health conditions and trends”;

11 (3) in subparagraph (C), by striking the period
12 and inserting “paragraph; and”;

13 (4) by adding at the end the following:

14 “(D) demonstrates the Agency’s efforts
15 to—

16 “(i) conduct a strategic national forest
17 inventory by measuring a statistically de-
18 signed consistent historical series of field
19 plots in combination with advanced tech-
20 nology to improve data, information, and
21 estimates of precision; and

22 “(ii) use advanced geospatial tech-
23 nologies to improve such area and volume
24 estimates, especially for sub-State regions
25 and smaller areas.”.

1 (b) MEMORANDA OF UNDERSTANDING.—In pre-
2 paring, publishing, and making available reports under
3 section 3(e)(3) of the Forest and Rangeland Renewable
4 Resources Research Act of 1978 (16 U.S.C. 1642(e)(3)),
5 as amended by subsection (a), the Secretary may enter
6 into memorandums of understanding with other Federal
7 agencies or departments to improve the use and integra-
8 tion of advanced remote sensing and geospatial tech-
9 nologies in the forest inventory and analysis program
10 under such section.

11 **SEC. 107. NATIONAL FOREST FOUNDATION ACTIVITIES.**

12 (a) ADDING FOREST CARBON STOCK TO THE PUR-
13 POSES OF THE NATIONAL FOREST FOUNDATION.—The
14 National Forest Foundation Act (16 U.S.C. 583j et seq.)
15 is amended—

16 (1) in section 402(b)—

17 (A) in paragraph (2), by striking “and” at
18 the end;

19 (B) in paragraph (3), by striking the pe-
20 riod at the end and inserting a semicolon; and

21 (C) by adding at the end the following:

22 “(4) encourage, accept, and administer private
23 gifts of money and of real and personal property for
24 the benefit of, or in connection with, the targets for

1 optimizing forest carbon stock established under sec-
2 tion 101 of the ‘Trillion Trees Act’; and

3 “(5) carry out the National Medal for Forest
4 Restoration under section 410.”;

5 (2) in section 405—

6 (A) in subsection (a), by striking “410”
7 and inserting “412”; and

8 (B) in subsection (b), by striking “410”
9 and inserting “412”;

10 (3) by redesignating section 410 as section 412;

11 and

12 (4) by inserting after section 409 the following:

13 **“SEC. 410. NATIONAL MEDAL FOR FOREST RESTORATION.**

14 “(a) ESTABLISHMENT.—The Foundation shall, in
15 consultation with the Secretary of Agriculture, establish
16 an award to be known as the ‘National Medal for Forest
17 Restoration’ to recognize outstanding contributions in do-
18 mestic reforestation (as defined in section 2 of the Trillion
19 Trees Act) activities carried out by individuals, commu-
20 nities, nonprofit organizations, and corporations.

21 “(b) NUMBER OF AWARDS.—The Foundation shall
22 award the National Medal for Forest Restoration at least
23 once a year.

24 “(c) LEVELS OF AWARDS.—The Foundation shall, in
25 consultation with Secretary of Agriculture, establish mul-

1 tiple levels of awards reflecting the considerations speci-
2 fied in subsection (e).

3 “(d) ADMINISTRATION OF AWARD.—The Foundation
4 shall administer the awards under this section, including
5 by—

6 “(1) developing a website and media presence
7 to highlight recipients of such awards; and

8 “(2) tracking the contribution of such recipients
9 towards the targets for increased forest carbon stock
10 established under section 101 of the Trillion Trees
11 Act.

12 “(e) CONSIDERATIONS.—In awarding the National
13 Medal for Forest Restoration under this section to an enti-
14 ty described in subsection (a), the Foundation shall con-
15 sider—

16 “(1) the number of acres planted or restored by
17 such entity;

18 “(2) the total increase in forest carbon stock
19 (as defined in section 2 of the Trillion Trees Act) re-
20 sulting from reforestation (as defined in section 2 of
21 the Trillion Trees Act) activities of such entity;

22 “(3) the educational impact of the reforestation
23 (as defined in section 2 of the Trillion Trees Act)
24 activities of such entity; and

1 “(4) the total value of any donations by such
2 entity to the Foundation.”.

3 (b) **FIFTH GRADE FORESTRY CHALLENGE.**—The
4 National Forest Foundation Act (16 U.S.C. 583j et seq.),
5 as amended by subsection (a), is further amended by in-
6 serting after section 410 the following:

7 **“SEC. 411. FIFTH GRADE FORESTRY CHALLENGE.**

8 “(a) **ESTABLISHMENT.**—The Foundation shall estab-
9 lish an educational grant program, in consultation with
10 the Secretary, to be known as the ‘5th Grade Forestry
11 Challenge’ to make grants to eligible recipients to—

12 “(1) provide 5th grade students with a seedling
13 to plant;

14 “(2) educate students about forestry, forest
15 management, active stewardship, and carbon stor-
16 age; and

17 “(3) encourage, accept, and administer private
18 gifts of money, technical expertise, and of real and
19 personal property for the benefit of this program.

20 “(b) **ELIGIBLE RECIPIENTS.**—The following entities
21 are eligible to receive a grant under this section:

22 “(1) A local educational agency.

23 “(2) A nonprofit entity that the Secretary de-
24 termines has a demonstrated history of community

1 engagement and education on natural resource
2 issues.

3 “(3) Other recipients as the Secretary deter-
4 mines to be appropriate.

5 “(c) COORDINATION.—In carrying out the program
6 required by this section, the Foundation may coordinate
7 on an ongoing basis with appropriate Federal, State, Trib-
8 al, and local resource management departments, local edu-
9 cational agencies, nonprofit organizations, private citizens,
10 and corporations to—

11 “(1) identify lands suitable for reforestation (as
12 defined in section 2 of the Trillion Trees Act);

13 “(2) encourage, accept, and administer private
14 gifts of money, technical expertise, and of real and
15 personal property for the benefit of such program;

16 “(3) manage and maintain reforested lands;
17 and

18 “(4) further educate students and the public
19 about forestry and forest carbon stock (as defined in
20 section 2 of the Trillion Trees Act).

21 “(d) REPORT REQUIRED.—Not later than 2 years
22 after the date on which the Foundation establishes the
23 grant program under this section, the Secretary shall sub-
24 mit to the relevant committees a report on the determina-
25 tion of the Secretary as to whether the grant program is

1 a financially effective means to educate students in the
2 fields described in subsection (a)(2).

3 “(e) DEFINITIONS.—In this subsection:

4 “(1) LOCAL EDUCATIONAL AGENCY.—The term
5 ‘local educational agency’ has the meaning given
6 that term in section 8101 of the Elementary and
7 Secondary Education Act of 1965 (20 U.S.C. 7801).

8 “(2) RELEVANT COMMITTEES.—The term ‘rel-
9 evant committees’ means—

10 “(A) the Committee on Natural Resources
11 of the House of Representatives;

12 “(B) the Committee on Agriculture of the
13 House of Representatives;

14 “(C) the Committee on Energy and Nat-
15 ural Resources of the Senate; and

16 “(D) the Committee on Agriculture, Nutri-
17 tion, and Forestry of the Senate.”.

18 **Subtitle B—Regeneration**

19 **SEC. 111. REFORESTATION PROGRAMS.**

20 (a) NATIONAL FOREST COVER POLICY.—

21 (1) IN GENERAL.—Section 3 of the Forest and
22 Rangeland Renewable Resources Planning Act of
23 1974 (16 U.S.C. 1601), as amended by section 105,
24 is further amended—

1 (A) by redesignating subsection (e) as sub-
2 section (f);

3 (B) by redesignating the second subsection
4 (d) (relating to the policy of Congress regarding
5 forested land in the National Forest System) as
6 subsection (e); and

7 (C) in subsection (e), as so redesignated—
8 (i) in paragraph (2)—

9 (I) in the first sentence—
10 (aa) by striking “eight years
11 following the enactment of this
12 subsection” and inserting “10
13 years following the date of enact-
14 ment of the ‘Trillion Trees Act’ ”;
15 and

16 (bb) by striking “eight-year
17 period” and inserting “10-year
18 period”;

19 (II) in the second sentence, by
20 striking “such eight-year period” and
21 inserting “the 10-year period”; and

22 (III) in the third sentence, by
23 striking “1978” and inserting
24 “2021”;

1 (ii) by redesignating paragraph (3) as
2 paragraph (4);

3 (iii) in the first sentence of paragraph
4 (4), as so redesignated, by striking “sub-
5 section (d)” and inserting “subsection”;
6 and

7 (iv) by inserting after paragraph (2)
8 the following:

9 “(3) REFORESTATION PRIORITIZATION.—

10 “(A) REFORESTATION PRIORITY.—

11 “(i) IN GENERAL.—In carrying out
12 this subsection, the Secretary shall give
13 priority to projects on the priority list de-
14 scribed in clause (ii).

15 “(ii) RANKED PRIORITY LIST.—The
16 Chief of the Forest Service shall, based on
17 recommendations from regional foresters,
18 create a ranked priority list of projects
19 that—

20 “(I) primarily take place on pri-
21 ority land;

22 “(II) promote reforestation (as
23 defined in section 2 of the Trillion
24 Trees Act) on priority land;

1 “(III) deliver measurable
2 progress and cost-effective results;

3 “(IV) increase forest carbon
4 stock (as defined in section 2 of the
5 Trillion Trees Act) in a sustainable
6 manner; and

7 “(V) provide additional benefits
8 relating to forest function and health,
9 soil health and productivity, wildlife
10 habitat and biodiversity, improved air
11 and water quality, job creation, en-
12 hanced outdoor recreation, and forest
13 products and byproducts.

14 “(B) PRIORITY LAND DEFINED.—In this
15 paragraph, the term ‘priority land’ means Na-
16 tional Forest System land that, due to an un-
17 planned adverse disturbance (including a wild-
18 fire, ice storm, blowdown, flooding, insect infes-
19 tation, disease, volcanic activity, or seismic
20 event)—

21 “(i) does not meet the conditions for
22 appropriate forest cover described in para-
23 graph (1);

24 “(ii) requires reforestation (as defined
25 in section 2 of the Trillion Trees Act) to

1 meet the objectives of an applicable forest
2 plan; and

3 “(iii) is unlikely to experience natural
4 regeneration without assistance.”.

5 (2) CONFORMING AMENDMENTS.—

6 (A) COOPERATIVE FORESTRY ASSISTANCE
7 ACT OF 1978.—Section 9 of the Cooperative
8 Forestry Assistance Act of 1978 (16 U.S.C.
9 2105) is amended in the matter following para-
10 graph (5) of subsection (g)—

11 (i) by striking “section 3(d)” and in-
12 serting “subsection (e) of section 3”; and

13 (ii) by striking “1601(d)” and insert-
14 ing “1601”.

15 (B) REFORESTATION TRUST FUND.—Sec-
16 tion 303 of the Act of October 14, 1980 (Public
17 Law 96–451; 16 U.S.C. 1606a) is amended in
18 subsection (d)(1)—

19 (i) by striking “section 3(d)” and in-
20 serting “subsection (e) of section 3”; and

21 (ii) by striking “1601(d)” and insert-
22 ing “1601”.

23 (C) STEWARDSHIP END RESULT CON-
24 TRACTING PROJECTS.—Section 604(c) of the
25 Healthy Forests Restoration Act of 2003 (16

1 U.S.C. 6591c(e)) is amended by adding at the
2 end the following:

3 “(8) Reforestation (as defined in section 2 of
4 the Trillion Trees Act), except the Chief shall give
5 priority to reforestation projects in accordance with
6 the priorities specified in subsection (e)(3)(A)(ii) of
7 section 3 of the Forest and Rangeland Renewable
8 Resources Planning Act of 1974 (16 U.S.C. 1601).”.

9 (b) TARGET YEAR FOR NATIONAL FOREST SYS-
10 TEM.—Section 9 of the Forest and Rangeland Renewable
11 Resources Planning Act of 1974 (16 U.S.C. 1607) is
12 amended by striking “2000” and inserting “2031”.

13 **SEC. 112. REFORESTATION TRUST FUND.**

14 Section 303 of the Act of October 14, 1980 (Public
15 Law 96–451; 16 U.S.C. 1606a) is amended in subsection
16 (b)(2), by striking “\$30,000,000” and inserting
17 “\$180,000,000”.

18 **SEC. 113. SOLVING SHORTAGES FOR SEEDLINGS.**

19 (a) IN GENERAL.—Not later than 1 year after the
20 date of the enactment of this section, the Secretary, acting
21 through the Chief of the Forest Service, shall develop and
22 implement a national strategy to increase the capacity of
23 Federal, State, Tribal, and private nurseries to address
24 the nationwide shortage of tree seedlings.

1 (b) ELEMENTS.—The strategy required under sub-
2 section (a) shall—

3 (1) be based on the best available science and
4 data; and

5 (2) identify and address—

6 (A) regional seedling shortages of bareroot
7 and container tree seedlings;

8 (B) regional reforestation opportunities
9 and the seedling supply necessary to fulfill such
10 opportunities;

11 (C) opportunities to enhance seedling di-
12 versity and close gaps in seed inventories; and

13 (D) barriers to expanding, enhancing, or
14 creating new infrastructure to increase nursery
15 capacity.

16 (c) FEDERAL NURSERIES.—Section 2 of the Act of
17 June 9, 1930 (16 U.S.C. 576a; commonly known as the
18 “Knutson-Vandenberg Act”), is amended by striking
19 “each fiscal year after year ending June 30, 1934, not
20 to exceed \$400,000,” and inserting “each of fiscal years
21 2021 through 2030, \$25,000,000.”

22 (d) LOAN PROGRAM FOR STATE, TRIBAL, AND PRI-
23 VATE NURSERIES.—

24 (1) IN GENERAL.—The Secretary shall carry
25 out a loan program to make or guarantee qualified

1 nursery loans to eligible entities under this sub-
2 section.

3 (2) APPLICATION.—To be eligible to receive a
4 qualified nursery loan or loan guarantee under this
5 subsection, an eligible entity shall submit to the Sec-
6 retary an application at such time, in such manner,
7 and containing such information as the Secretary
8 may require, including a plan to maintain the ge-
9 netic and physical quality of seedlings of the eligible
10 entity.

11 (3) PRIORITY.—In making qualified nursery
12 loans or loan guarantees under this subsection, the
13 Secretary shall give priority to eligible entities
14 that—

15 (A) are small businesses, in particular
16 small businesses located in rural areas;

17 (B) create or support jobs, particularly in
18 rural areas; and

19 (C) serve regions with high demand for re-
20 forestation.

21 (4) QUALIFIED NURSERY PROJECT.—A loan or
22 loan guarantee under this subsection may only be
23 used to carry out a qualified nursery project to—

24 (A) develop, expand, enhance, or improve
25 nursery capacity or infrastructure;

1 (B) establish nurseries; or

2 (C) develop or implement quality control
3 measures at nurseries.

4 (5) LOAN AND LOAN GUARANTEE TERMS.—

5 (A) AMOUNT GUARANTEED.—The portion
6 of a loan that the Secretary may guarantee
7 under this subsection may not be greater than
8 80 percent of the principal amount of such
9 loan.

10 (B) REPAYMENT.—The period of repay-
11 ment for a loan made under this subsection
12 shall not exceed 20 years.

13 (6) ADMINISTRATIVE PROVISIONS.—

14 (A) LIMITATION ON AUTHORITY.—The
15 total amount of qualified nursery loans made or
16 guaranteed under this subsection by the Sec-
17 retary may not exceed \$1,000,000,000.

18 (B) DISTRIBUTION.—The Secretary shall
19 ensure, to the maximum extent practicable, that
20 loans made or guaranteed under this subsection
21 are distributed across diverse geographic re-
22 gions.

23 (7) DEFINITIONS.—In this subsection:

24 (A) ELIGIBLE ENTITY.—The term “eligible
25 entity” means—

1 (i) a State, Tribal, or local govern-
2 ment; or

3 (ii) a domestic private, non-profit, or
4 cooperative organization.

5 (B) NURSERY.—The term “nursery”
6 means a State, Tribal, or local government or
7 privately-owned facility that grows, stores, ex-
8 tracts, or monitors bareroot or container tree
9 seedlings.

10 (C) QUALIFIED NURSERY LOAN.—The
11 term “qualified nursery loan” means a low-in-
12 terest loan, the proceeds of which are used to
13 cover the costs to the borrower of carrying out
14 a qualified nursery project described in para-
15 graph (4).

16 **SEC. 114. HEALTHY FOREST RESERVE PROGRAM.**

17 (a) ESTABLISHMENT.—Section 501(a) of the Healthy
18 Forests Restoration Act of 2003 (16 U.S.C. 6571(a)) is
19 amended—

20 (1) in paragraph (3), by striking “and” at the
21 end;

22 (2) in paragraph (4), by striking the period at
23 the end and inserting “; and”; and

24 (3) by adding at the end the following:

1 “(5) to promote the management and conserva-
2 tion of existing forests and regeneration of addi-
3 tional trees in pursuit of the targets for increased
4 forest carbon stock established under section 101 of
5 the Trillion Trees Act.”.

6 (b) ENROLLMENT PRIORITY.—Section 502(f)(1) of
7 the Healthy Forests Restoration Act of 2003 (16 U.S.C.
8 6572) is amended to read as follows:

9 “(1) IN GENERAL.—The Secretary of Agri-
10 culture shall give priority to the enrollment of land
11 that—

12 “(A) provides the greatest conservation
13 benefit to—

14 “(i) primarily, species listed as endan-
15 gered or threatened under section 4 of the
16 Endangered Species Act of 1973 (16
17 U.S.C. 1533); and

18 “(ii) secondarily, species that—

19 “(I) are not listed as endangered
20 or threatened under section 4 of the
21 Endangered Species Act of 1973 (16
22 U.S.C. 1533); but

23 “(II)(aa) are candidates for such
24 listing, State-listed species, or special
25 concern species; or

1 “(bb) are deemed a species of
2 greatest conservation need under a
3 State wildlife action plan; or

4 “(B) promotes the restoration of marginal
5 farmland or degraded forestland into healthy
6 forest ecosystems.”.

7 (c) RESTORATION PLANS.—Section 503(b)(4) of the
8 Healthy Forests Restoration Act of 2003 (16 U.S.C.
9 6573(b)) is amended to read as follows:

10 “(4) Practices to increase forest carbon stock
11 (as defined in section 2 of the Trillion Trees Act)
12 over a period of at least 20 years, including through
13 reforestation of degraded forestland and
14 afforestation (as such terms are defined in such sec-
15 tion) of marginal farmland.”.

16 (d) COST SHARING.—Section 504 of the Healthy
17 Forests Restoration Act of 2003 (16 U.S.C. 6574) is
18 amended by adding at the end the following:

19 “(e) COST-SHARE PERMITTED.—In the case of land
20 enrolled in the healthy forest reserve program for the pur-
21 pose of promoting the restoration of marginal farmland
22 or degraded forestland into healthy forest ecosystems, the
23 Secretary of Agriculture may pay up to 75 percent for the
24 cost of practices determined necessary for restoration or

1 afforestation (as defined in section 2 of the Trillion Trees
2 Act) of such land.”.

3 **SEC. 115. FORESTRY EDUCATION AND WORKFORCE DEVEL-**
4 **OPMENT GRANT PROGRAM.**

5 (a) IN GENERAL.—The Secretary shall establish a
6 competitive grant program to make grants to eligible insti-
7 tutions to carry out forestry education and workforce de-
8 velopment programs to prepare students for careers in for-
9 estry.

10 (b) PROPOSAL.—To be eligible to receive a grant
11 under this section, an eligible institution shall submit to
12 the Secretary a proposal at such time, in such manner,
13 and containing such information as the Secretary may re-
14 quire.

15 (c) EQUITABLE AWARDS.—For each fiscal year for
16 which grants are awarded under this section, the amount
17 of grant funds awarded to eligible institutions described
18 in paragraph (1) of subsection (f) shall be equal to the
19 amount of grant funds awarded to eligible institutions de-
20 scribed in paragraphs (2) and (3) of such subsection.

21 (d) USE OF GRANT FUNDS.—

22 (1) IN GENERAL.—Grants made under this sec-
23 tion shall be used to—

24 (A) award scholarships to students enrolled
25 in the eligible institution and pursuing degrees

1 in forestry, including students historically
2 underrepresented in the field of forestry;

3 (B) expand, enhance, or improve forestry
4 educational capacities of the eligible institution,
5 including libraries, curriculum, faculty, and sci-
6 entific instrumentation;

7 (C) recruit and retain—

8 (i) secondary school or undergraduate
9 students to pursue certifications in forestry
10 or acquire training in technical forestry
11 skills, including students historically
12 underrepresented in the field of forestry; or

13 (ii) undergraduate and graduate stu-
14 dents to pursue degrees in forestry, includ-
15 ing students historically underrepresented
16 in the field of forestry;

17 (D) design and develop resources or pro-
18 grams that prepare students enrolled in the eli-
19 gible institution for careers in forestry, includ-
20 ing internship and apprenticeship programs;

21 (E) provide hands-on training and research
22 opportunities for such students; or

23 (F) carry out any other activity the Sec-
24 retary determines appropriate.

1 (2) CLARIFICATION OF FORESTRY EDU-
2 CATION.—For purposes of paragraph (1), the terms
3 “degrees in forestry”, “certifications in forestry”,
4 and “training in technical forestry skills” include de-
5 grees, certifications, and training in forestry, forest
6 sciences, natural resources management, or other re-
7 lated educational disciplines.

8 (e) PAYMENT OF NON-FEDERAL SHARE.—As a con-
9 dition of receiving a grant under this section, the Sec-
10 retary shall require the recipient of the grant to provide
11 funds or in-kind support from non-Federal sources in an
12 amount that is specified by the Secretary and based on
13 assessed institutional needs.

14 (f) ELIGIBLE INSTITUTION DEFINED.—In this sec-
15 tion, the term “eligible institution” means—

16 (1) a land grant college or university, including
17 an institution eligible to receive funding under—

18 (A) the Act of July 2, 1862;

19 (B) the Act of August 30, 1890, including
20 Tuskegee University;

21 (C) Public Law 87–788 (commonly known
22 as the “McIntire-Stennis Act of 1962”); or

23 (D) the Equity in Educational Land-Grant
24 Status Act of 1994 (7 U.S.C. 301 note);

1 (2) a community college or area career and
2 technical education school (as defined in section 3 of
3 the Carl D. Perkins Career and Technical Education
4 Act of 2006 (20 U.S.C. 2302)); or

5 (3) an institution of higher education (as de-
6 fined in section 102 of the Higher Education Act of
7 1965 (20 U.S.C. 1002)).

8 (g) AUTHORIZATION OF APPROPRIATIONS.—There
9 are authorized to be appropriated to the Secretary
10 \$20,000,000 for each of fiscal years 2021 through 2030
11 to carry out this section.

12 **SEC. 116. CIVILIAN CONSERVATION CENTERS REFOREST-**
13 **ATION ACTIVITIES.**

14 Section 147(d) of the Workforce Innovation and Op-
15 portunity Act (29 U.S.C. 3197(d)) is amended by adding
16 at the end the following:

17 “(4) REFORESTATION ACTIVITIES.—Enrollees
18 in Civilian Conservation Centers may provide assist-
19 ance in carrying out priority reforestation (as de-
20 fined in section 2 of the Trillion Trees Act) projects
21 in accordance with subsection (e)(3)(A)(ii) of section
22 3 of the Forest and Rangeland Renewable Resources
23 Planning Act of 1974 (16 U.S.C. 1601).”.

1 **SEC. 117. FOREST TECHNOLOGY ENHANCEMENTS FOR CON-**
2 **SERVATION AND HABITAT IMPROVEMENT.**

3 (a) ESTABLISHMENT OF PILOT PROGRAM.—Not
4 later than 180 days after the date of the enactment of
5 this section, the Secretary, in consultation with the Sec-
6 retary of the Interior, shall either establish a research, de-
7 velopment, and testing pilot program or expand an appli-
8 cable existing program to—

9 (1) assess new technologies, including un-
10 manned aircraft system, geospatial, or remote sens-
11 ing technologies, across all reforestation activities;

12 (2) accelerate the deployment and integration of
13 such technologies into the operations of the Secre-
14 taries; and

15 (3) collaborate and cooperate with State, Trib-
16 al, and private geospatial information system organi-
17 zations with respect to such technologies.

18 (b) EXPANDING USE OF UNMANNED AIRCRAFT SYS-
19 TEMS.—Not later than 1 year after the date of enactment
20 of this section, the Secretaries shall enter into an agree-
21 ment to develop consistent protocols and plans for the use
22 of unmanned aircraft system technologies for reforestation
23 activities.

24 (c) DOMESTIC MANUFACTURE REQUIREMENT.—Any
25 unmanned aircraft system technology or component of un-

1 manned aircraft system technology used under this section
2 shall be made and manufactured in the United States.

3 (d) RULE OF CONSTRUCTION.—Nothing in this sec-
4 tion shall be construed as prohibiting the Secretary of Ag-
5 riculture from using unmanned aircraft systems tech-
6 nologies in effect on the date of the enactment of this sec-
7 tion.

8 (e) UNMANNED AIRCRAFT SYSTEM DEFINED.—In
9 this section, the term “unmanned aircraft system” has the
10 meaning given the term in section 44801 of title 49,
11 United States Code.

12 (f) SUNSET.—The authority to carry out this section
13 shall terminate on the date that is 5 years after the date
14 of the enactment of this section.

15 **Subtitle C—Urban Forests**

16 **SEC. 121. URBAN AND COMMUNITY FORESTRY ASSISTANCE.**

17 (a) TREE CITY USA GRANT PROGRAM.—Section 9
18 of the Cooperative Forestry Assistance Act of 1978 (16
19 U.S.C. 2105) is amended—

20 (1) by redesignating subsections (h) and (i) as
21 subsections (j) and (k), respectively; and

22 (2) by inserting after subsection (g) the fol-
23 lowing;

24 “(h) TREE CITY USA GRANT PROGRAM.—

1 “(1) IN GENERAL.—The Secretary shall estab-
2 lish a grant program to be known as the ‘Tree City
3 USA Grant Program’ to provide competitive grants
4 to eligible entities to enhance and maintain urban
5 forests.

6 “(2) APPLICATION.—

7 “(A) IN GENERAL.—To be eligible to be
8 awarded a grant under paragraph (1), an eligi-
9 ble entity shall submit an application to the
10 Secretary at such time, in such manner, and
11 containing such information as the Secretary
12 may require, including a proposal to enhance
13 and maintain urban forests.

14 “(B) APPLICATION ASSISTANCE.—A non-
15 profit organization that partners with an eligi-
16 ble entity may submit an application under sub-
17 paragraph (A) on behalf of such eligible entity.

18 “(3) PRIORITY.—In awarding grants under
19 paragraph (1), the Secretary shall give priority to el-
20 igible entities that submit proposals under para-
21 graph (2)(A) that—

22 “(A) enhance, maintain, or improve access
23 to urban forests in—

24 “(i) typically underserved areas; or

1 “(ii) areas with low tree or environ-
2 mental equity;

3 “(B) further a statewide assessment or
4 local government initiative to enhance and
5 maintain urban forests;

6 “(C) include a plan to mitigate risks from
7 insects, disease, and non-native invasive species;
8 and

9 “(D) include a plan to monitor and main-
10 tain new and existing trees.

11 “(4) TECHNICAL ASSISTANCE.—The Secretary
12 may provide technical assistance to local govern-
13 ments to assist such local governments with—

14 “(A) becoming eligible entities; and

15 “(B) proposals under paragraph (2)(A).

16 “(5) MATCHING FUNDS.—An eligible entity
17 that receives a grant under this subsection shall con-
18 tribute an amount of non-Federal funds (in cash or
19 in kind) that is at least equal to the amount of the
20 Federal funds received.

21 “(6) PREMIER TREE CITY.—Not later than 1
22 year after the date of the enactment of the Trillion
23 Trees Act, and annually through 2030 thereafter,
24 the Secretary shall designate as a ‘Premier Tree
25 City’ one eligible entity awarded a grant under this

1 subsection to recognize the superior efforts of such
2 eligible entity in enhancing and maintaining urban
3 forests.

4 “(7) AUTHORIZATION OF APPROPRIATIONS.—In
5 addition to the amounts authorized under subsection
6 (k), there are authorized to be appropriated
7 \$1,000,000 for each of fiscal years 2021 through
8 2030 to carry out this subsection.

9 “(8) ELIGIBLE ENTITY DEFINED.—In this sub-
10 section, the term ‘eligible entity’ means a local gov-
11 ernment that—

12 “(A) serves an urban and community area;
13 and

14 “(B) a tree planting non-profit organiza-
15 tion recognizes as having—

16 “(i) a tree board or department;

17 “(ii) a tree care ordinance;

18 “(iii) a community forestry program
19 with an annual budget of at least \$2 per
20 capita; and

21 “(iv) an Arbor Day observance and
22 proclamation.”.

23 (b) COOPERATIVE AGREEMENTS FOR URBAN WOOD
24 UTILIZATION.—Section 9 of the Cooperative Forestry As-
25 sistance Act of 1978 (16 U.S.C. 2105), as amended by

1 subsection (a), is further amended by inserting after sub-
2 section (h) the following:

3 “(i) PILOT PROJECT FOR COOPERATIVE AGREE-
4 MENTS FOR URBAN WOOD UTILIZATION.—

5 “(1) COOPERATIVE AGREEMENTS.—The Sec-
6 retary may enter into cooperative agreements with
7 State and local governments, institutions of higher
8 education, private or non-profit organizations, and
9 other entities that support projects that create wood
10 products from dead and fallen trees in urban and
11 community areas.

12 “(2) PRIORITIZATION.—The Secretary shall
13 prioritize entering into cooperative agreements
14 that—

15 “(A) support local job creation;

16 “(B) are located in typically underserved
17 areas or areas with low tree or environmental
18 equity;

19 “(C) develop new uses for dead and fallen
20 trees; and

21 “(D) improve urban forest health and re-
22 siliency.

23 “(3) TECHNICAL AND FINANCIAL ASSIST-
24 ANCE.—The Secretary may provide technical or fi-
25 nancial assistance to entities that enter into a coop-

1 erative agreement under paragraph (1) to facili-
2 tate—

3 “(A) research on new uses for dead and
4 fallen trees in urban and community areas; and

5 “(B) market expansion opportunities for
6 products made from dead and fallen trees in
7 urban and community areas.

8 “(4) REPORT.—Not later than 1 year after the
9 date of the enactment of the Trillion Trees Act, the
10 Secretary shall provide a report to the relevant com-
11 mittees on—

12 “(A) the implementation of this subsection;
13 and

14 “(B) recommendations to encourage eco-
15 nomic development and job creation by creating
16 new markets for wood products made from
17 urban timber sources.

18 “(5) DEFINITIONS.—In this subsection—

19 “(A) DEAD AND FALLEN TREES.—The
20 term ‘dead and fallen trees’ means trees that—

21 “(i) are dying or have died;

22 “(ii) have partially or completely fall-
23 en over; or

1 “(iii) have been negatively impacted
2 by insects, disease, or weather-related dis-
3 turbances.

4 “(B) RELEVANT COMMITTEES.—The term
5 ‘relevant committees’ means—

6 “(i) the Committees on Natural Re-
7 sources and Agriculture of the House of
8 Representatives; and

9 “(ii) the Committees on Energy and
10 Natural Resources and Agriculture, Nutri-
11 tion, and Forestry of the Senate.”.

12 (c) PROGRAM OF EDUCATION AND TECHNICAL AS-
13 SISTANCE CLARIFICATION FOR CARBON STORAGE.—Sec-
14 tion 9(d)(3) of the Cooperative Forestry Assistance Act
15 of 1978 (16 U.S.C. 2105(d)(3)) is amended—

16 (1) in subparagraph (C), by striking “and”
17 after the semicolon;

18 (2) in subparagraph (D), by inserting “and”
19 after the semicolon; and

20 (3) by inserting at the end the following new
21 subparagraph:

22 “(E) identifying opportunities to increase
23 carbon storage through afforestation (as de-
24 fined in section 2 of the Trillion Trees Act) and

1 scientific urban and community forestry man-
2 agement;”.

3 (d) NATIONAL URBAN AND COMMUNITY FORESTRY
4 ADVISORY COUNCIL.—Section 9(g) of the Cooperative
5 Forestry Assistance Act of 1978 (16 U.S.C. 2105(g)) is
6 amended—

7 (1) in paragraph (2), by adding at the end the
8 following new subparagraph:

9 “(F) MEETINGS.—The Council established
10 under this subsection shall meet not less than
11 twice annually.”; and

12 (2) by adding at the end the following new
13 paragraph:

14 “(7) RENEWAL OF COUNCIL.—

15 “(A) IN GENERAL.—Not later than 30
16 days after the date of the enactment of the
17 Trillion Trees Act, the Secretary shall renew
18 the Council.

19 “(B) TERMINATION.—The Council shall
20 not terminate except as provided by an Act of
21 Congress.”.

22 (e) URBAN AND COMMUNITY FORESTRY ACTION
23 PLAN CLARIFICATION FOR CARBON STORAGE.—Section
24 9(g)(3) of the Cooperative Forestry Assistance Act of

1 1978 (16 U.S.C. 2105(g)(3)) is amended by adding at the
2 end the following:

3 “(G) Recommendations for identifying op-
4 portunities to increase carbon storage through
5 afforestation (as defined in section 2 of the
6 Trillion Trees Act) and scientific urban and
7 community forestry management.”.

8 (f) AUTHORIZATION OF APPROPRIATIONS.—Sub-
9 section (k) of section 9 of the Cooperative Forestry Assist-
10 ance Act of 1978 (16 U.S.C. 2105), as redesignated by
11 subsection (a), is amended—

12 (1) by striking “\$30,000,000” and inserting
13 “\$50,000,000”; and

14 (2) by striking “fiscal years 1991 through
15 1995” and inserting “fiscal years 2021 through
16 2025”.

17 **SEC. 122. CIVILIAN CONSERVATION CENTER URBAN FOR-**
18 **ESTRY DEMONSTRATION PROGRAM.**

19 Section 147(d) of the Workforce Innovation and Op-
20 portunity Act (29 U.S.C. 3197(d)), as amended by section
21 116, is further amended by adding at the end the fol-
22 lowing:

23 “(5) URBAN FORESTRY.—

24 “(A) ESTABLISHMENT.—Not later than 1
25 year after the date of the enactment of this

1 paragraph, the Secretary of Agriculture and the
2 Secretary of Labor shall jointly establish Civil-
3 ian Conservation Centers in urban and commu-
4 nity areas (as defined in subsection (j) of sec-
5 tion 9 of the Cooperative Forestry Assistance
6 Act of 1978 (16 U.S.C. 2105)).

7 “(B) FOCUS.—In addition to the training
8 and skills required under paragraph (1), the Ci-
9 vilian Conservation Centers established pursu-
10 ant to subparagraph (A) shall provide training
11 on urban forestry issues, including urban forest
12 conservation, management, maintenance, and
13 monitoring.”.

14 **SEC. 123. MEMORANDUM OF UNDERSTANDING TO COORDI-**
15 **NATE URBAN FORESTRY PROGRAMS.**

16 Not later than 120 days after the date of the enact-
17 ment of this Act, the Secretary shall enter into a memo-
18 randum of understanding with the Secretaries of Health
19 and Human Services, Housing and Urban Development,
20 Interior, Labor, and Transportation and the Adminis-
21 trator of the Environmental Protection Agency to—

- 22 (1) identify strategies to increase equitable ac-
23 cess to urban forests through existing programs and
24 authorities;

1 (2) coordinate existing urban forestry pro-
2 grams;

3 (3) conduct research on the benefits of urban
4 forests for air quality, heat island mitigation, energy
5 burden reduction, and enhanced shading for heat-re-
6 silient housing and active transit; and

7 (4) conduct research on improving coordination
8 between the agencies to address insects, disease, and
9 non-native invasive species in urban and community
10 areas.

11 **Subtitle D—International Forests**

12 **SEC. 131. SENSE OF CONGRESS.**

13 It is the sense of Congress that—

14 (1) the Trillion Trees Initiative established by
15 the World Economic Forum should be supported;

16 (2) under such Trillion Trees Initiative, coun-
17 tries, corporations, and individuals around the globe
18 will contribute to conserving, restoring, and growing
19 one trillion trees;

20 (3) one trillion new trees globally would seques-
21 ter a significant amount of atmospheric carbon and
22 constitute a pragmatic step towards addressing glob-
23 al carbon emissions; and

24 (4) under this Act, the United States will—

1 (A) take a leadership role in conserving,
2 restoring, and growing one trillion trees glob-
3 ally;

4 (B) use the vast natural assets, robust for-
5 est products market, and technical expertise of
6 the United States, to conserve, regenerate,
7 manage, and utilize domestic forestland; and

8 (C) incentivize the use of sustainable build-
9 ing products to store carbon.

10 **SEC. 132. INTERNATIONAL FOREST FOUNDATION.**

11 (a) ESTABLISHMENT.—The Administrator of the
12 United States Agency for International Development may
13 enter into an agreement with a non-profit organization to
14 establish an “International Forest Foundation” (in this
15 section referred to as the “Foundation”), which shall not
16 be an agency or instrumentality of the United States Gov-
17 ernment.

18 (b) PURPOSES.—The purposes of the Foundation
19 shall be—

20 (1) to encourage, accept, and administer private
21 gifts of money and of real and personal property for
22 the benefit of, or in connection with, the activities
23 and services carried out by the United States Agen-
24 cy for International Development to promote refor-

1 estation, afforestation, and the prevention of defor-
2 estation around the world;

3 (2) to use private funds to support, undertake,
4 and conduct activities that further the goals estab-
5 lished under section 101; and

6 (3) to undertake, conduct, and encourage edu-
7 cational, technical, and other assistance and other
8 activities that support international goals to increase
9 global carbon capture and storage through the pro-
10 motion of healthy forests and responsible forest
11 management.

12 (c) TRANSFER OF FUNDS; LIABILITY.—

13 (1) TRANSFER OF FUNDS.—The Administrator
14 may authorize, pursuant to an agreement entered
15 into in accordance with this section, the transfer of
16 funds of the United States Agency for International
17 Development to a nonprofit organization for the pur-
18 pose of offsetting any administrative costs of the
19 Foundation.

20 (2) LIABILITY.—The United States shall not be
21 liable for any debts, defaults, acts, or omissions of
22 the Foundation. The full faith and credit of the
23 United States shall not extend to any obligations of
24 the Foundation.

1 **SEC. 133. INTERNATIONAL ENGAGEMENT.**

2 (a) IN GENERAL.—To the maximum extent prac-
3 ticable, the Administrator of the United States Agency for
4 International Development shall prioritize programs to
5 support reforestation and afforestation, and to prevent de-
6 forestation, in developing countries and in regions that
7 have experienced significant levels of deforestation or
8 whose biodiversity, local economy, and stability would be
9 significantly impacted by deforestation or loss of forest
10 canopy cover around the world.

11 (b) COORDINATION.—In carrying out the programs
12 prioritized in accordance with subsection (a), the Adminis-
13 trator shall, to the maximum extent practicable, make use
14 of public-private partnerships to facilitate engagement by
15 nonprofit organizations and industry partners.

16 **SEC. 134. GLOBAL CLIMATE CHANGE PROGRAM.**

17 (a) FORESTRY INCLUDED.—Section 2402(c)(2) of
18 the Global Climate Change Prevention Act of 1990 (7
19 U.S.C. 6701(c)(2)) is amended by inserting “and for-
20 estry” after “agriculture”.

21 (b) STUDY OF GLOBAL CLIMATE CHANGE, AGRI-
22 CULTURE, AND FORESTRY.—Section 2403(b) of the Glob-
23 al Climate Change Prevention Act of 1990 (7 U.S.C.
24 6702(b)) is amended—

1 (1) in the first proviso, by striking “The Sec-
2 retary shall conduct a study” and inserting the fol-
3 lowing:

4 “‘The Secretary shall, not later than 2 years after the
5 date of enactment of the Trillion Trees Act, conduct a
6 study and submit a report to Congress”;

7 (2) in paragraph (2), by striking “and” at the
8 end;

9 (3) in paragraph (3), by striking the period at
10 the end and inserting “; and”; and

11 (4) by adding at the end the following:

12 “(5) identify and address programs which could
13 lead to increased forest carbon stock (as defined in
14 section 2 of the Trillion Trees Act) globally, healthy
15 international forest ecosystems, and a globally sus-
16 tainable forest products market.”.

17 (c) OFFICE OF INTERNATIONAL FORESTRY.—Section
18 2405(c) of the Global Climate Change Prevention Act of
19 1990 (7 U.S.C. 6704(c)) is amended—

20 (1) in paragraph (2), by striking the “and” at
21 the end;

22 (2) in paragraph (3), by striking the period at
23 the end and inserting “; and”; and

24 (3) by adding at the end the following:

1 “(4) identify and implement programs which
2 lead to—

3 “(A) increased forest carbon stock (as de-
4 fined in section 2 of the Trillion Trees Act)
5 globally;

6 “(B) healthy international forest eco-
7 systems; and

8 “(C) a globally sustainable forest products
9 market.”.

10 (d) **AUTHORIZATION OF APPROPRIATIONS.**—Section
11 2412 of the Global Climate Change Prevention Act of
12 1990 (7 U.S.C. 6710) is amended by striking “1991
13 through 1997” and inserting “2021 through 2025”.

14 **SEC. 135. INTERNATIONAL FORESTRY COOPERATION.**

15 Section 602(b)(1) of the International Forestry Co-
16 operation Act of 1990 (16 U.S.C. 4501(b)(1)) is amend-
17 ed—

18 (1) in subparagraph (G), by striking “and” at
19 the end;

20 (2) in subparagraph (H), by inserting “and” at
21 the end; and

22 (3) by adding at the end the following:

23 “(I) activities that increase forest carbon
24 stock (as defined in section 2 of the Trillion
25 Trees Act), including reforestation and

1 afforestation (as such terms are defined in such
2 section) programs.”.

3 **SEC. 136. MODIFICATIONS TO AUTHORITIES RELATING TO**
4 **TROPICAL FORESTS.**

5 Section 118 of the Foreign Assistance Act of 1961
6 (22 U.S.C. 2151p–1) is amended as follows:

7 (1) In subsection (a)(2), by inserting “, includ-
8 ing by reducing global forest carbon stock (as de-
9 fined in section 2 of the Trillion Trees Act)” before
10 the period at the end.

11 (2) In subsection (c)(1), by inserting “, refor-
12 estation (as defined in section 2 of the Trillion Trees
13 Act),” after “conservation”.

14 (3) In subsection (c)(2)(A), by inserting “and
15 impact on global carbon emissions” after “irrevers-
16 ible losses”.

17 (4) In subsection (c)(6), by inserting “(includ-
18 ing projects to increase forest carbon stock)” after
19 “sustainable forestry projects and practices”.

20 (5) In subsection (c)(8), by inserting “increas-
21 ing forest carbon stock (as defined in section 2 of
22 the Trillion Trees Act),” after “soil conservation,”.

23 (6) In subsection (f), by inserting “and a study
24 on the total carbon sequestered through increases in
25 tropical forest carbon stock (as defined in section 2

1 of the Trillion Trees Act) globally as a result of pro-
2 grams, projects, and activities carried out under this
3 section” before the period at the end.

4 **TITLE II—CARBON SEQUESTRA-**
5 **TION THROUGH IMPROVED**
6 **FOREST MANAGEMENT AC-**
7 **TIVITIES**

8 **SEC. 201. LAND USE PLANNING; SUPPLEMENTS TO PRO-**
9 **GRAMMATIC ENVIRONMENTAL IMPACT**
10 **STATEMENTS.**

11 (a) PRIORITY AREAS.—

12 (1) AREAS IDENTIFIED.—The Secretary shall
13 designate a landscape-level area on covered land as
14 a priority area if—

15 (A) the Secretary has identified such area
16 as having a high or very high risk of wildfire;

17 (B) the completion of covered projects in
18 such area would reduce the risk of carbon emis-
19 sions as a result of wildfire or tree mortality;
20 and

21 (C) the area is covered by an existing pro-
22 grammatic environmental impact statement ap-
23 plicable to such covered projects.

24 (2) EFFECT OF IDENTIFICATION.—The Sec-
25 retary shall prioritize review under section 102(2)(C)

1 of the National Environmental Policy Act of covered
2 projects in a priority area over the completion of any
3 other review under such section.

4 (3) DEADLINE FOR IDENTIFICATION.—The Sec-
5 retary shall establish the priority areas required
6 under paragraph (1)—

7 (A) in the case of priority areas for water-
8 shed protection projects, critical infrastructure
9 protection projects, or wildlife habitat restora-
10 tion projects, not later than 60 days after the
11 date of the enactment of this section; and

12 (B) in the case of priority areas for
13 wildland-urban interface protection projects, not
14 later than 60 days after the programmatic envi-
15 ronmental impact statement required under
16 subsection (b) is completed.

17 (4) REVIEW AND MODIFICATION.—

18 (A) IN GENERAL.—Except with respect to
19 areas subject to review under subparagraph
20 (B), not later than 5 years after the date of the
21 enactment of this section and not less than once
22 every 5 years thereafter, the Secretary shall re-
23 view the priority areas established under para-
24 graph (1) and modify, add, or remove such pri-
25 ority areas.

1 (B) WILDLAND-URBAN INTERFACE PRO-
2 TECTION PRIORITY AREAS.—Not later than 5
3 years after the date on which the programmatic
4 environmental impact statement required by
5 subsection (b) is complete and not less than
6 once every 5 years thereafter, the Secretary
7 shall review the priority areas established under
8 paragraph (1) and covered by such statement
9 and modify, add, or remove such priority areas.

10 (b) PROGRAMMATIC ENVIRONMENTAL IMPACT
11 STATEMENT FOR WILDLAND-URBAN INTERFACE PRO-
12 TECTION PROJECTS.—Not later than 5 years after the
13 date of the enactment of this section, the Secretary shall
14 complete a programmatic environmental impact statement
15 in accordance with section 102(2)(C) of the National En-
16 vironmental Policy Act of 1969 (42 U.S.C. 4332(2)(C))
17 for wildland-urban interface protection on public lands, in-
18 cluding with respect to—

19 (1) lands classified as high or very high risk of
20 wildfire; and

21 (2) areas with at-risk communities (as defined
22 in section 101 of the Healthy Forest Restoration Act
23 of 2003 (16 U.S.C. 6511)).

24 (c) COMPLIANCE WITH THE NATIONAL ENVIRON-
25 MENTAL POLICY ACT.—

1 (1) IN GENERAL.—The requirements of section
2 102(2)(C) of National Environmental Policy Act of
3 1969 (42 U.S.C. 4332(2)(C) with respect to a major
4 Federal action taken under this section shall be
5 deemed to be met—

6 (A) for wildland-urban interface protection
7 projects proposed after the date of completion
8 of the programmatic environmental impact
9 statement required by subsection (b), by
10 supplementing such programmatic environ-
11 mental impact statement and incorporating rel-
12 evant additional regional analyses that have
13 been completed by Federal agencies since such
14 statement was finalized;

15 (B) for watershed protection projects, by
16 supplementing the programmatic environmental
17 impact statement entitled “National Forest
18 System Land Management Planning” published
19 in January 2012 and incorporating relevant ad-
20 ditional regional analyses that have been com-
21 pleted by Federal agencies since such statement
22 was finalized;

23 (C) for critical infrastructure protection
24 projects, by supplementing the programmatic
25 environmental impact statement entitled “Des-

1 ignation of Energy Corridors on Federal Land
2 in the 11 Western States (DOE/EIS–0386)”
3 published on November 28, 2008 and incor-
4 porating relevant additional regional analyses
5 that have been completed by Federal agencies
6 since such statement was finalized; and

7 (D) for wildlife habitat restoration
8 projects, by supplementing the programmatic
9 environmental impact statement entitled “Na-
10 tional Forest System Land Management Plan-
11 ning” published in January 2012 and incor-
12 porating relevant additional regional analyses
13 that have been completed by Federal agencies
14 since such statement was finalized.

15 (2) COORDINATION AND CONSULTATION.—In
16 developing a supplement under subparagraphs (A)
17 through (D) of paragraph (1), the Secretary shall
18 consult and coordinate with—

19 (A) appropriate State, Tribal, and local
20 governments;

21 (B) transmission infrastructure and water
22 infrastructure owners, operators, and devel-
23 opers; and

24 (C) other appropriate entities.

1 (d) ENVIRONMENTAL REVIEW IN PRIORITY
2 AREAS.—

3 (1) IN GENERAL.—If the Regional Forester de-
4 termines that a proposed covered project has been
5 sufficiently analyzed by a previously completed pro-
6 grammatic environmental impact statement, such
7 statement shall be deemed to fulfill the requirements
8 of section 102(2)(C) of the National Environmental
9 Policy Act of 1969 (42 U.S.C. 4332(2)(C)) with re-
10 spect to such project. The applicable Regional For-
11 ester shall publish any such determinations on a
12 publicly available website.

13 (2) ADDITIONAL ENVIRONMENTAL REVIEW.—If
14 the Regional Forester determines that a proposed
15 covered project has not been sufficiently analyzed
16 under paragraph (1) and additional environmental
17 review under the National Environmental Policy Act
18 of 1969 (42 U.S.C. 4321 et seq.) is necessary, the
19 applicable Regional Forester shall rely on analysis in
20 previously completed environmental reviews under
21 such Act in analyzing the potential impacts of the
22 proposed covered project.

23 (e) REPORTS TO CONGRESS.—Not later than Feb-
24 ruary 1 of the first fiscal year beginning after the date
25 of the enactment of this section, and each February 1

1 thereafter, the Secretary shall submit to the relevant com-
2 mittees a report that includes—

3 (1) a description, with respect to the preceding
4 year, of the progress of covered projects in priority
5 areas established under this section; and

6 (2) projections for how such covered projects
7 will reduce the risk and severity of carbon emissions
8 from wildfires and tree mortality.

9 (f) DEFINITIONS.—In this section:

10 (1) COVERED LAND.—The term “covered land”
11 means National Forest System lands that are not
12 excluded from forest management activities as a re-
13 sult of—

14 (A) an applicable forest plan;

15 (B) inclusion in the National Wilderness
16 Preservation System;

17 (C) inclusion within a National or State-
18 specific inventoried roadless area established by
19 the Secretary, unless—

20 (i) the forest management activity to
21 be carried out is consistent with the forest
22 plan applicable to the area; and

23 (ii) the Secretary, or their designee,
24 determines the forest management activity

1 is allowed under the roadless rule gov-
2 erning such lands; or

3 (D) any other Federal law.

4 (2) COVERED PROJECTS.—The term “covered
5 projects” means critical infrastructure protection
6 projects, watershed protection projects, wildland-
7 urban interface protection projects, and wildlife
8 habitat restoration projects.

9 (3) CRITICAL INFRASTRUCTURE PROTECTION
10 PROJECT.—The term “critical infrastructure protec-
11 tion project” means a forest or rangeland manage-
12 ment project with the primary objective of—

13 (A) reducing the risk of wildfire ignition
14 within or adjacent to—

15 (i) a utility infrastructure right-of-
16 way; or

17 (ii) public transportation infrastruc-
18 ture;

19 (B) protecting public infrastructure from
20 wildfire; or

21 (C) removing hazard trees and or other
22 hazardous fuels from a utility infrastructure
23 right-of-way.

24 (4) RELEVANT COMMITTEES.—The term “rel-
25 evant committees” means—

1 (A) the Committee on Agriculture, Nutri-
2 tion, and Forestry of the Senate;

3 (B) the Committee on Energy and Natural
4 Resources of the Senate;

5 (C) the Committee on Agriculture of the
6 House of Representatives; and

7 (D) the Committee on Natural Resources
8 of the House of Representatives.

9 (5) WATERSHED PROTECTION PROJECT.—The
10 term “watershed protection project” means a forest
11 or rangeland management project with the objective
12 of—

13 (A) protecting a municipal or Tribal water
14 source from damage or destruction caused by
15 wildfire;

16 (B) improving, maintaining, or restoring
17 water quality or yield; or

18 (C) any combination of the purposes speci-
19 fied in subparagraphs (A) through (B).

20 (6) WILDLAND-URBAN INTERFACE PROTECTION
21 PROJECT.—The term “wildland-urban interface pro-
22 tection project” means a forest or rangeland man-
23 agement project which takes place within the bound-
24 aries of, or adjacent to, an at-risk community (as

1 defined in section 101 of the Healthy Forests Res-
2 toration Act of 2003 (16 U.S.C. 6511)).

3 (7) WILDLIFE HABITAT RESTORATION
4 PROJECT.—The term “wildlife habitat restoration
5 project” means a forest or rangeland management
6 project with the primary objective of—

7 (A) protecting, improving, maintaining, or
8 restoring wildlife habitat; or

9 (B) protecting, improving, maintaining, re-
10 storing, or enhancing management with respect
11 to critical habitat (as defined in section 4 of the
12 Endangered Species Act of 1973 (16 U.S.C.
13 1532)).

14 **SEC. 202. FOREST CARBON STOCK ON STATE AND PRIVATE**
15 **FORESTS.**

16 (a) ADDING INCREASING FOREST CARBON STOCK AS
17 A PRIORITY.—Section 2(b) of the Cooperative Forestry
18 Assistance Act of 1978 (16 U.S.C. 2101) is amended—

19 (1) by redesignating subparagraphs (6) through
20 (10) as subparagraphs (7) through (11), respec-
21 tively; and

22 (2) by inserting after paragraph (5) the fol-
23 lowing:

24 “(6) the encouragement of afforestation (as de-
25 fined in section 2 of the Trillion Trees Act), refor-

1 estation, management, and related optimizations of
2 forest carbon stock (as such terms are defined in
3 such section) for climate and other ecological bene-
4 fits;”.

5 (b) SUPPORT FOR STATE ASSESSMENTS AND STRAT-
6 EGIES FOR FOREST RESOURCES WHEN CONSIDERING
7 CARBON EMISSIONS.—Section 2A(a)(1) of the Coopera-
8 tive Forestry Assistance Act of 1978 (16 U.S.C.
9 2101a(a)(1)) is amended—

10 (1) by redesignating subparagraph (C) and (D)
11 as subparagraphs (D) and (E), respectively; and

12 (2) by inserting after subparagraph (B) the fol-
13 lowing:

14 “(C) the current amount of forest carbon
15 stock (as defined in section 2 of the Trillion
16 Trees Act and incorporating data from the for-
17 est inventory and analysis program under sec-
18 tion 3(e)) on State lands and opportunities for
19 increased forest carbon stock;”.

20 (c) INCREASING FOREST CARBON STOCK THROUGH
21 THE FOREST STEWARDSHIP PROGRAM.—Section 5(d)(1)
22 of the Cooperative Forestry Assistance Act of 1978 (16
23 U.S.C. 2103a(d)) is amended by inserting “carbon seques-
24 tration and storage” before “and the aesthetic”.

1 (d) INCREASING FOREST CARBON STOCK THROUGH
2 THE COMMUNITY FOREST AND OPEN SPACE CONSERVA-
3 TION PROGRAM.—Section 7A(c)(1)(B)(ii) of the Coopera-
4 tive Forestry Assistance Act of 1978 (16 U.S.C.
5 2103d(c)(1)(B)(ii)) is amended by inserting “ increasing
6 forest carbon stock (as defined in section 2 of the Trillion
7 Trees Act) and promoting,” after “including”.

8 (e) INCREASING FOREST CARBON STOCK THROUGH
9 THE PROMOTION OF FOREST HEALTH.—Section 8(a) of
10 the Cooperative Forestry Assistance Act of 1978 (16
11 U.S.C. 2104(a)) is amended—

12 (1) by redesignating paragraphs (4) through
13 (6) as paragraphs (5) through (7); and

14 (2) by inserting after paragraph (3) the fol-
15 lowing:

16 “(4) protect or enhance forest carbon stock (as
17 defined in section 2 of the Trillion Trees Act) on
18 healthy forestland;”.

19 (f) INCREASING FOREST CARBON STOCK THROUGH
20 THE REDUCTION OF CATASTROPHIC WILDFIRE.—Section
21 10A(b)(1) of the Cooperative Forestry Assistance Act of
22 1978 (16 U.S.C. 2106c(b)(1)) is amended—

23 (1) in subparagraph (C), by striking “and” at
24 the end;

1 (2) in subparagraph (D), by striking the period
2 and inserting “and” at the end; and

3 (3) by inserting at the end the following:

4 “(E) to educate the public about the car-
5 bon stored in healthy forests and carbon emit-
6 ted through wildfire and forest decline.”.

7 (g) INCREASING FOREST CARBON STOCK THROUGH
8 THE STATE AND PRIVATE FOREST LANDSCAPE-SCALE
9 RESTORATION.—Section 13A of the Cooperative Forestry
10 Assistance Act of 1978 (16 U.S.C. 2109a) is amended—

11 (1) in subsection (e)—

12 (A) in paragraph (6), by striking “and” at
13 the end;

14 (B) by redesignating paragraph (7) as
15 paragraph (8); and

16 (C) by inserting after paragraph (6) the
17 following:

18 “(7) to improve the potential to increase forest
19 carbon stock (as defined in section 2 of the Trillion
20 Trees Act); and”;

21 (2) in subsection (1), by amending paragraph
22 (3) to read as follows:

23 “(3) AUTHORIZATION OF APPROPRIATIONS.—
24 There is authorized to be appropriated to the Fund
25 \$25,000,000 for each fiscal year beginning with the

1 first full fiscal year after the date of the enactment
2 of the Trillion Trees Act through fiscal year 2025,
3 to remain available until expended.”.

4 **SEC. 203. GOOD NEIGHBOR AUTHORITY.**

5 Section 8206 of the Agricultural Act of 2014 (16
6 U.S.C. 2113a) is amended—

7 (1) in subsection (a)(4)(A)—

8 (A) in clause (ii), by striking “and” at the
9 end;

10 (B) by redesignating clause (iii) as clause
11 (iv);

12 (C) by inserting after clause (ii) the fol-
13 lowing:

14 “(iii) activities to increase forest car-
15 bon stock (as defined in section 2 of the
16 Trillion Trees Act), including reforestation
17 (as defined in such section) activities;”;

18 (D) in clause (iv), as so redesignated, by
19 striking the period at the end and inserting “;
20 or”; and

21 (E) by adding at the end the following:

22 “(v) any combination of activities
23 specified in clauses (i) through (iv).”;

24 (2) in subsection (b)(1), by adding at the end
25 of the following:

1 “(C) REFORESTATION PRIORITY.—With
2 respect to forest, rangeland, and watershed res-
3 toration services described in subsection
4 (a)(4)(A)(iii), the Secretary of Agriculture may
5 enter into good neighbor agreements under this
6 section in accordance with the priorities speci-
7 fied in subsection (e)(3)(A)(ii) of section 3 of
8 the Forest and Rangeland Renewable Resources
9 Planning Act of 1974 (16 U.S.C. 1601).”; and
10 (3) in subsection (b)(2), by amending subpara-
11 graph (C) to read as follows:

12 “(C) TREATMENT OF REVENUE.—Funds
13 received from the sale of timber by a Governor
14 of a State under a good neighbor agreement
15 shall be retained and used by the Governor—

16 “(i) to carry out authorized restora-
17 tion services under such good neighbor
18 agreement; and

19 “(ii) if funds are remaining after car-
20 rying out the services under clause (i), to
21 carry out authorized restoration services
22 within the State under other good neighbor
23 agreements.”.

1 **SEC. 204. RESEARCH AND DEVELOPMENT PROGRAMS.**

2 Section 3 of the Forest and Rangeland Renewable
3 Resources Research Act of 1978 (16 U.S.C. 1642) is
4 amended—

5 (1) in subsection (a), by adding at the end the
6 following:

7 “(6) Renewable resource assessment research
8 shall also include, as appropriate, research activities
9 related to the sequestration of carbon, including the
10 increased carbon storage through afforestation (as
11 defined in section 2 of the Trillion Trees Act), refor-
12 estation (as defined in such section), forest and
13 rangeland management, and the utilization of wood
14 and other materials derived from forest and range-
15 land renewable resources to store carbon in building
16 materials, industrial and consumer products.”; and

17 (2) in subsection (d)(2), by adding at the end
18 the following:

19 “(F) Carbon sequestration.”.

20 **TITLE III—MARKET INCENTIVES**
21 **FOR CARBON SEQUESTRATION**

22 **SEC. 301. BIOCHAR DEMONSTRATION PROJECT AND GRANT**
23 **PROGRAM.**

24 (a) DEMONSTRATION PROJECTS.—

25 (1) ESTABLISHMENT.—

1 (A) IN GENERAL.—Not later than 2 years
2 after the date of the enactment of this section,
3 the Secretaries shall establish a program to
4 enter into partnerships with eligible entities to
5 carry out demonstration projects to support the
6 development and commercialization of biochar
7 in accordance with this subsection.

8 (B) LOCATION OF DEMONSTRATION
9 PROJECTS.—The Secretaries shall, to the max-
10 imum extent practicable, establish at least one
11 biochar demonstration project in each Forest
12 Service region.

13 (2) PROPOSALS.—To be eligible to enter into a
14 partnership to carry out a biochar demonstration
15 project under paragraph (1)(A), an eligible entity
16 shall submit to the Secretaries a proposal at such
17 time, in such manner, and containing such informa-
18 tion as the Secretaries may require.

19 (3) PRIORITY.—In selecting proposals under
20 paragraph (2), the Secretaries shall give priority to
21 partnering with eligible entities that submit pro-
22 posals to carry out biochar demonstration projects
23 that—

24 (A) have the most carbon sequestration po-
25 tential;

- 1 (B) will create new jobs and contribute to
2 local economies, particularly in rural areas;
- 3 (C) will demonstrate—
- 4 (i) new and innovative uses of biochar;
- 5 (ii) viable markets for cost-effective
6 biochar-based products;
- 7 (iii) the ecosystem services of biochar;
- 8 (iv) the benefits of biochar to restore
9 forest health and resiliency, including for
10 forest soils and watersheds; or
- 11 (v) any combination of purposes speci-
12 fied in clauses (i) through (iv);
- 13 (D) are located in local markets that have
14 the greatest need for the biochar production
15 units due to—
- 16 (i) nearby lands identified as having
17 high or very high or extreme risk of wild-
18 fire;
- 19 (ii) availability of sufficient quantities
20 of feedstocks; or
- 21 (iii) a high level of demand for
22 biochar or other commercial byproducts of
23 biochar; or
- 24 (E) any combination of purposes specified
25 in subparagraphs (A) through (D).

1 (4) USE OF FUNDS.—In carrying out the pro-
2 gram established under paragraph (1)(A), the Secre-
3 taries may enter into partnerships and provide fund-
4 ing to carry out demonstration projects that—

5 (A) acquire and test various feedstocks and
6 their efficacy;

7 (B) develop and optimize commercially and
8 technologically viable biochar production units,
9 including mobile and permanent units;

10 (C) demonstrate the production of biochar
11 from forest residues and the use of biochar to
12 restore forest health and resiliency;

13 (D) build, expand, or establish biochar fa-
14 cilities;

15 (E) conduct research on new and innova-
16 tive uses of biochar or demonstrate cost-effec-
17 tive market opportunities for biochar and
18 biochar-based products;

19 (F) carry out any other activities the Sec-
20 retaries determine appropriate; or

21 (G) any combination of the purposes speci-
22 fied in subparagraphs (A) through (F).

23 (5) FEEDSTOCK REQUIREMENTS.—To the max-
24 imum extent practicable, a biochar demonstration
25 project under this subsection shall, with respect to

1 the feedstock used under such project, derive at
2 least 50 percent of such feedstock from forest
3 thinning and management activities, including mill
4 residues, conducted on National Forest System
5 lands.

6 (6) REVIEW OF BIOCHAR DEMONSTRATION.—

7 (A) IN GENERAL.—The Secretaries shall
8 conduct regionally-specific research, including
9 economic analyses and life-cycle assessments, on
10 the biochar produced from the demonstration
11 projects under this subsection, including—

12 (i) the effects of such biochar on—

13 (I) forest health and resiliency;

14 (II) carbon capture and seques-
15 tration, including increasing soil car-
16 bon in the short-term and long-term;

17 (III) productivity, reduced input
18 costs, and water retention in agricul-
19 tural practices;

20 (IV) soil and grassland health for
21 grazing activities, including grazing
22 activities on Federal land;

23 (V) environmental remediation
24 activities, including abandoned mine
25 land remediation; and

1 (VI) other ecosystem services of
2 biochar;

3 (ii) the efficacy of biochar as a co-
4 product of biofuels or in biochemicals; and

5 (iii) whether biochar can effectively be
6 used to produce any other technologically
7 and commercially viable outcome.

8 (B) COORDINATION.—The Secretaries
9 shall, to the maximum extent practicable, pro-
10 vide data, analysis, and other relevant informa-
11 tion collected under subparagraph (A) to eligi-
12 ble institutions conducting research and devel-
13 opment activities on biochar pursuant to receiv-
14 ing a grant under subsection (b).

15 (7) LIMITATION ON FUNDING FOR ESTAB-
16 LISHING BIOCHAR FACILITIES.—In the case of an el-
17 igible entity that enters in to a partnership to carry
18 out a biochar demonstration project under this sub-
19 section and seeks to establish a biochar facility
20 under such demonstration project, the Secretaries
21 may not provide funding to such eligible entity in an
22 amount greater than 35 percent of the capital cost
23 of establishing such biochar facility.

24 (b) BIOCHAR RESEARCH AND DEVELOPMENT GRANT
25 PROGRAM.—

1 (1) ESTABLISHMENT.—The Secretary of Agri-
2 culture shall establish an applied biochar research
3 and development grant program to make competitive
4 grants to eligible institutions to carry out the activi-
5 ties described in paragraph (3).

6 (2) APPLICATIONS.—To be eligible to receive a
7 grant under this subsection, an eligible entity shall
8 submit to the Secretary a proposal at such time, in
9 such manner, and containing such information as
10 the Secretary may require.

11 (3) USE OF FUNDS.—An eligible institution
12 that receives a grant under this subsection shall use
13 the grant funds to conduct applied research on—

14 (A) the effect of biochar on forest health
15 and resiliency, accounting for variations in
16 biochar, soil, climate, and other factors;

17 (B) the effect of biochar on soil health and
18 water retention, accounting for variations in
19 biochar, soil, climate, and other factors;

20 (C) the long-term carbon sequestration po-
21 tential of biochar;

22 (D) the best management practices of
23 biochar and biochar based-products to—

24 (i) maximize carbon sequestration
25 benefits; and

1 (ii) maximize the commercial viability
2 and application of such products in for-
3 estry, agriculture, environmental remedi-
4 ation, water quality improvement, and
5 other uses;

6 (E) the regional uses of biochar to increase
7 productivity and profitability, including—

8 (i) uses in agriculture and environ-
9 mental remediation; and

10 (ii) use as a co-product in fuel produc-
11 tion;

12 (F) new and innovative uses from biochar
13 byproducts; and

14 (G) opportunities to expand markets for
15 biochar and create jobs, particularly in rural
16 areas.

17 (c) REPORTS.—

18 (1) REPORT TO CONGRESS.—Not later than 2
19 years after the date of the enactment of this section,
20 the Secretaries shall submit a report to Congress
21 that—

22 (A) includes policy and program rec-
23 ommendations to improve the widespread use of
24 biochar;

1 (B) identifies the areas of research needed
2 to advance biochar commercialization; and

3 (C) identifies barriers to further biochar
4 commercialization, including permitting and
5 siting considerations.

6 (2) PRESIDENT’S ANNUAL BUDGET REQUEST.—

7 Beginning 2 years after the date of the enactment
8 of this section and annually until the date described
9 in subsection (d), the Secretaries shall include in the
10 budget materials submitted to Congress in support
11 of the President’s annual budget request (submitted
12 to Congress pursuant to section 1105 of title 31,
13 United States Code) for each fiscal year a report on
14 the status of the demonstration projects carried out
15 under subsection (a) and the research and develop-
16 ment grants carried out under subsection (b).

17 (d) SUNSET.—The authority to carry out this section
18 shall terminate on the date that is 10 years after the date
19 of the enactment of this section.

20 (e) DEFINITIONS.—In this section:

21 (1) BIOCHAR.—The term “biochar” means car-
22 bonized biomass produced by converting feedstock
23 through reductive thermal processing for non-fuel
24 uses.

1 (2) ELIGIBLE ENTITY.—The term “eligible enti-
2 ty” means—

- 3 (A) State, local, and Tribal governments;
4 (B) eligible institutions; and
5 (C) private, non-private, or cooperative en-
6 ties.

7 (3) ELIGIBLE INSTITUTION.—The term “eligi-
8 ble institution” means land-grant colleges and uni-
9 versities, including institutions eligible for funding
10 under the—

- 11 (A) Act of July 2, 1862;
12 (B) Act of August 30, 1890, including
13 Tuskegee University;
14 (C) Public Law 87–788 (commonly known
15 as the “McIntire-Stennis Act of 1962”); or
16 (D) Equity in Educational Land-Grant
17 Status Act of 1994 (7 U.S.C. 301 note).

18 (4) FEEDSTOCK.—The term “feedstock” means
19 excess biomass in the form of plant matter or mate-
20 rials that serves as the raw material for the produc-
21 tion of biochar.

22 (5) SECRETARIES.—The term “Secretaries”
23 means—

- 24 (A) the Secretary of Agriculture, acting
25 through the Chief of the Forest Service; and

1 (B) the Secretary of Energy, acting
2 through the Director of the Office of Science.

3 (f) AUTHORIZATION OF APPROPRIATIONS.—There is
4 authorized to be appropriated \$50,000,000 for each of fis-
5 cal years 2021 through 2023 to carry out this section.

6 **SEC. 302. SUSTAINABLE BUILDING AND RESIDENCE CRED-**
7 **IT.**

8 (a) IN GENERAL.—Subpart B of part IV of sub-
9 chapter A of chapter 1 of the Internal Revenue Code of
10 1986 is amended by adding at the end the following new
11 section:

12 **“SEC. 30E. SUSTAINABLE BUILDING AND RESIDENCE CRED-**
13 **IT.**

14 “(a) IN GENERAL.—There shall be allowed as a cred-
15 it against the tax imposed by this chapter for the taxable
16 year an amount equal to the sustainability percentage of—

17 “(1) the taxpayer’s purchase price of a quali-
18 fying building or residence, and

19 “(2) the taxpayer’s remodeling price of a build-
20 ing or structure described in subsection (c)(3)(B).

21 “(b) SUSTAINABILITY PERCENTAGE.—For purposes
22 of this section:

23 “(1) IN GENERAL.—

24 “(A) PURCHASE PRICE.—The sustain-
25 ability percentage with respect to the purchase

1 price of any qualifying building or residence
2 shall be a percentage equal to the lesser of—

3 “(i) the percentage by which the sus-
4 tainability score for such qualifying build-
5 ing or residence exceeds the average sus-
6 tainability score for the class to which such
7 building or residence belongs, or

8 “(ii) 25 percent.

9 “(B) REMODELING PRICE.—The sustain-
10 ability percentage with respect to the remod-
11 eling price of a building or structure shall be a
12 percentage equal to the lesser of—

13 “(i) the percentage by which, after re-
14 modeling, the sustainability score for such
15 building or structure exceeds the average
16 sustainability score for the class to which
17 such building or structure belongs, or

18 “(ii) 12.5 percent.

19 “(2) SUSTAINABILITY SCORING.—

20 “(A) IN GENERAL.—Not later than 1 year
21 after the date of the enactment of this section,
22 the Secretary (in consultation with the Sec-
23 retary of Energy) shall establish—

24 “(i) a certification process for deter-
25 mining a sustainability score with respect

1 to any building for purposes of the credit
2 allowed under this section, and

3 “(ii) an average sustainability score
4 for different classes of buildings for pur-
5 poses of the comparison under subsection
6 (b)(1)(A)(i) or subsection (b)(1)(B)(i).

7 “(B) FACTORS FOR SCORE.—Such score
8 shall at least take into account the following
9 factors:

10 “(i) The net carbon emitted during
11 the production and delivery of materials
12 used in construction of the building.

13 “(ii) The net carbon emitted during
14 the operation of the building on a yearly
15 basis.

16 “(iii) The amount of carbon retained
17 by the building, taking into account build-
18 ing construction materials and processes
19 and continuing use or disposal of carbon in
20 connection with the use of the building.

21 “(iv) The climate in which the build-
22 ing is located.

23 “(C) AVERAGE SUSTAINABILITY.—The
24 classes for which average sustainability scores

1 are determined shall at least take into account
2 the following distinguishing characteristics:

3 “(i) Residential and commercial build-
4 ings.

5 “(ii) Multi-family and single-family
6 residential.

7 “(iii) The size, volume, and intended
8 use of the building.

9 “(D) UPDATES.—The Secretary (in con-
10 sultation with the Secretary of Energy) shall
11 update the sustainability scoring and the sus-
12 tainability score averages established under sub-
13 paragraph (A) not less frequently than once
14 every 5 calendar years.

15 “(E) ADVISORY BOARD.—The Secretary
16 shall establish a volunteer board that advises
17 the Secretary on the sustainability score devel-
18 opment and updates. Such board shall be ap-
19 pointed at the discretion of the Secretary and
20 shall include experts in relevant fields, including
21 energy, construction, transportation, agri-
22 culture, and labor.

23 “(c) OTHER DEFINITIONS AND SPECIAL RULES.—

1 “(1) PURCHASE PRICE.—The term ‘purchase
2 price’ means so much of the adjusted basis of the
3 property as is not attributable to land.

4 “(2) REMODELING PRICE.—The term ‘remod-
5 eling price’ means the price of remodeling or expan-
6 sion of a property, as defined by the Secretary after
7 consultation with the Secretary of Energy.

8 “(3) QUALIFYING BUILDING OR RESIDENCE.—
9 The term ‘qualifying building or residence’ means,
10 with respect to a taxpayer—

11 “(A) any dwelling unit first used as a resi-
12 dence by the taxpayer, or

13 “(B) any other building or structure of a
14 character subject to the allowance for deprecia-
15 tion and first placed in service by the taxpayer.

16 “(4) CONSTRUCTION.—Any qualifying building
17 or residence constructed by the taxpayer shall be
18 treated as purchased by the taxpayer on the date the
19 taxpayer first occupies the residence, or places such
20 building in service, as the case may be.

21 “(5) TRANSFER OF CREDIT.—

22 “(A) IN GENERAL.—If a taxpayer elects
23 the application of this paragraph for any tax-
24 able year, the amount of credit determined
25 under this section for such year which would

1 (but for this paragraph) be allowable to the tax-
2 payer shall be allowable to the person des-
3 igned by the taxpayer. The person so des-
4 igned shall be treated as the taxpayer for pur-
5 poses of this title.

6 “(B) TREATMENT OF AMOUNTS PAID FOR
7 ASSIGNMENT.—If any amount is paid to the
8 person who assigns the credit determined under
9 this section, then no portion of such amount
10 shall be includible in such person’s gross in-
11 come.

12 “(6) BASIS ADJUSTMENT.—For purposes of
13 this subtitle, if a credit is allowed under this section
14 with respect to any qualified building or residence,
15 the basis of such building or residence shall be re-
16 duced by the amount of the credit so allowed.

17 “(7) APPLICATION WITHOUT CREDITS.—

18 “(A) BUSINESS CREDIT TREATED AS PART
19 OF GENERAL BUSINESS CREDIT.—So much of
20 the credit which would be allowed under sub-
21 section (a) for any taxable year (determined
22 without regard to this paragraph) that is attrib-
23 utable to property of a character subject to an
24 allowance for depreciation shall be treated as a

1 credit listed in section 38(b) for such taxable
2 year (and not allowed under subsection (a)).

3 “(B) PERSONAL CREDIT.—For purposes of
4 this title, the credit allowed under subsection
5 (a) for any taxable year (determined after ap-
6 plication of subparagraph (A)) shall be treated
7 as a credit allowable under subpart A for such
8 taxable year.

9 “(8) CARBON STORAGE CERTIFICATION.—
10 Under the certification process established under
11 subsection (b)(2)(A), the Secretaries shall addition-
12 ally establish a process for certifying to the taxpayer
13 the amount of carbon dioxide stored by a building or
14 residence as determined under (b)(2)(B)(iii).”.

15 (b) CLERICAL AMENDMENT.—The table of sections
16 for subpart B of part IV of subchapter A of chapter 1
17 of such Code is amended by adding at the end the fol-
18 lowing new item:

“Sec. 30E. Sustainable building and residence credit.”.

19 (c) EFFECTIVE DATE.—The amendments made by
20 this section shall apply to property purchased after De-
21 cember 31, 2020.

1 **SEC. 303. CLARIFICATION OF RESEARCH AND DEVELOP-**
2 **MENT PROGRAM FOR CELLULOSIC BIO-**
3 **CHEMICAL AND BIOPLASTICS.**

4 (a) IN GENERAL.—The Secretary, acting through the
5 Research and Development deputy area and the State and
6 Private Forestry deputy area of the Forest Service, shall
7 conduct performance-driven research and development and
8 provide for education and technical assistance for the pur-
9 pose of facilitating the use of cellulosic biochemical and
10 bioplastics products in the United States.

11 (b) ACTIVITIES.—In carrying out subsection (a), the
12 Secretary shall—

13 (1) after collaboration with the forest products
14 industry, conservation organizations, and institutions
15 of higher education, conduct research and develop-
16 ment and provide for education and technical assist-
17 ance at the Forest Products Laboratory or through
18 the State and Private Forestry deputy area that
19 meets measurable performance goals for the achieve-
20 ment of the priorities listed in subsection (c); and

21 (2) after coordination and collaboration with
22 the entities referred to in paragraph (1), make com-
23 petitive grants to institutions of higher education for
24 such institutions to conduct research and develop-
25 ment and carry out educational programs and pro-
26 vide technical assistance.

1 (c) PRIORITIES.—In awarding grants under sub-
2 section (b)(2), the Secretary shall give priority to applica-
3 tions from institutions of higher education proposing
4 projects—

5 (1) to address ways to improve the commer-
6 cialization of cellulosic biochemical and bioplastics
7 products;

8 (2) for the conduct of applied research, includ-
9 ing projects designed—

10 (A) to bring products from benchtop to
11 production scale; and

12 (B) for end-of-life reuse, recycling, and dis-
13 posal of the project;

14 (3) which, based upon the lifecycle analysis of
15 forest carbon stock developed under section 105(e),
16 will lead to an increase in forest carbon stock
17 through the extraction of raw materials through the
18 manufacture of biochemical and bioplastics products;
19 or

20 (4) to address one or more other research areas
21 identified by the Secretary, in consultation with con-
22 servation organizations, institutions of higher edu-
23 cation, and the forest products industry.

24 (d) TIMEFRAME.—To the maximum extent prac-
25 ticable, the measurable performance goals for the research

1 and development, education, and technical assistance
2 under subsection (a) shall be achievable within 5 years.

3 (e) DEFINITIONS.—In this section:

4 (1) CELLULOSIC BIOCHEMICAL PRODUCT.—The
5 term “cellulosic biochemical product” means any
6 biochemical, including bioethanol and its derivatives,
7 that is derived from wood or plant cellulose fiber.

8 (2) CELLULOSIC BIOPLASTICS PRODUCT.—The
9 term “cellulosic bioplastics product” means any bio-
10 plastic that is derived from wood or plant cellulose
11 fiber.

12 (3) INSTITUTION OF HIGHER EDUCATION.—The
13 term “institution of higher education” has the
14 meaning given such term in of sections 101 and 102
15 of the Higher Education Act of 1965 (20 U.S.C.
16 1001 and 1002).

17 **SEC. 304. TRIBAL AND ALASKA NATIVE BIOMASS DEM-**
18 **ONSTRATION PROJECT EXTENSION.**

19 (a) TRIBAL BIOMASS.—Section 3(a) of the Tribal
20 Forest Protection Act of 2004 (25 U.S.C. 3104 note) is
21 amended by striking “fiscal years 2017 through 2021”
22 and inserting “fiscal years 2021 through 2025”.

23 (b) ALASKA NATIVE BIOMASS.—Section 202(c)(2) of
24 the Indian Tribal Energy Development and Self-Deter-
25 mination Act Amendments of 2017 (25 U.S.C. 3104 note)

- 1 is amended by striking “fiscal years 2017 through 2021”
- 2 and inserting “fiscal years 2021 through 2025”.

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