

[DISCUSSION DRAFT]118TH CONGRESS
1ST SESSION**H. R.** _____

To establish demonstration projects to support the development and commercialization of biochar and a competitive grant program to carry out research and development with respect to biochar.

IN THE HOUSE OF REPRESENTATIVES

Mr. WESTERMAN introduced the following bill; which was referred to the Committee on _____

A BILL

To establish demonstration projects to support the development and commercialization of biochar and a competitive grant program to carry out research and development with respect to biochar.

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

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Biochar Innovations
5 and Opportunities for Conservation, Health, and Advance-
6 ments in Research Act” or the “BIOCHAR Act”.

1 **SEC. 2. BIOCHAR INNOVATIONS AND OPPORTUNITIES FOR**
2 **CONSERVATION, HEALTH, AND ADVANCE-**
3 **MENTS IN RESEARCH.**

4 (a) DEMONSTRATION PROJECTS.—

5 (1) ESTABLISHMENT.—

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

13 (B) LOCATION OF DEMONSTRATION
14 PROJECTS.—The Secretaries shall, to the max-
15 imum extent practicable, establish at least one
16 biochar demonstration project in each Forest
17 Service region and each Bureau of Land Man-
18 agement region.

19 (2) PROPOSALS.—To be eligible to enter into a
20 partnership to carry out a biochar demonstration
21 project under paragraph (1)(A), an eligible entity
22 shall submit to the Secretaries a proposal at such
23 time, in such manner, and containing such informa-
24 tion as the Secretaries may require.

25 (3) PRIORITY.—In selecting proposals under
26 paragraph (2), the Secretaries shall give priority to

1 partnering with eligible entities that submit pro-
2 posals to carry out biochar demonstration projects
3 that—

4 (A) have the most carbon sequestration po-
5 tential;

6 (B) will create new jobs and contribute to
7 local economies, particularly in rural areas;

8 (C) will demonstrate—

9 (i) new and innovative uses of biochar;

10 (ii) viable markets for cost effective
11 biochar-based products;

12 (iii) the ecosystem services of biochar;

13 (iv) the benefits of biochar to restore
14 forest heath and resiliency, including for
15 forest soils and watersheds; or

16 (v) any combination of purposes speci-
17 fied in clauses (i) through (iv);

18 (D) are located in local markets that have
19 the greatest need for the biochar production
20 units due to—

21 (i) nearby lands identified as having
22 high or very high or extreme risk of wild-
23 fire;

24 (ii) availability of sufficient quantities
25 of feedstocks; or

1 (iii) a high level of demand for
2 biochar or other commercial byproducts of
3 biochar; or

4 (E) any combination of purposes specified
5 in subparagraphs (A) through (D).

6 (4) ASSISTANCE.—In carrying out the program
7 established under paragraph (1)(A), the Secretaries
8 may enter into partnerships and provide financial
9 and technical assistance to carry out demonstration
10 projects that—

11 (A) acquire and test various feedstocks and
12 their efficacy;

13 (B) develop and optimize commercially and
14 technologically viable biochar production units,
15 including mobile and permanent units;

16 (C) demonstrate the production of biochar
17 from forest residues and the use of biochar to
18 restore forest health and resiliency;

19 (D) build, expand, or establish biochar fa-
20 cilities;

21 (E) conduct research on new and innova-
22 tive uses of biochar or demonstrate cost-effec-
23 tive market opportunities for biochar and
24 biochar-based products;

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

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

5 (5) FEEDSTOCK REQUIREMENTS.—To the max-
6 imum extent practicable, a biochar demonstration
7 project under this subsection shall, with respect to
8 the feedstock used under such project, derive at
9 least 50 percent of such feedstock from forest
10 thinning and management activities, including mill
11 residues, conducted on National Forest System
12 lands or public lands.

13 (6) REVIEW OF BIOCHAR DEMONSTRATION.—

14 (A) IN GENERAL.—The Secretaries shall
15 conduct regionally specific research, including
16 economic analyses and life-cycle assessments, on
17 the biochar produced from the demonstration
18 projects under this subsection, including—

19 (i) the effects of such biochar on—

20 (I) forest health and resiliency;

21 (II) carbon capture and seques-
22 tration, including increasing soil car-
23 bon in the short-term and long-term;

1 (III) productivity, reduced input
2 costs, and water retention in agricul-
3 tural practices;

4 (IV) soil and grassland health for
5 grazing activities, including grazing
6 activities on National Forest System
7 land and public land;

8 (V) environmental remediation
9 activities, including abandoned mine
10 land remediation; and

11 (VI) other ecosystem services of
12 biochar;

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

15 (iii) whether biochar can effectively be
16 used to produce any other technologically
17 and commercially viable outcome.

18 (B) COORDINATION.—The Secretaries
19 shall, to the maximum extent practicable, pro-
20 vide data, analysis, and other relevant informa-
21 tion collected under subparagraph (A) to eligi-
22 ble institutions conducting research and devel-
23 opment activities on biochar pursuant to receiv-
24 ing a grant under subsection (b).

1 (7) LIMITATION ON FUNDING FOR ESTAB-
2 LISHING BIOCHAR FACILITIES.—In the case of an el-
3 igible entity that enters in to a partnership to carry
4 out a biochar demonstration project under this sub-
5 section and seeks to establish a biochar facility
6 under such demonstration project, the Secretaries
7 may not provide funding to such eligible entity in an
8 amount greater than 35 percent of the capital cost
9 of establishing such biochar facility.

10 (b) BIOCHAR RESEARCH AND DEVELOPMENT GRANT
11 PROGRAM.—

12 (1) ESTABLISHMENT.—The Secretary of the In-
13 terior shall establish or expand an existing applied
14 biochar research and development grant program to
15 make competitive grants to eligible institutions to
16 carry out the activities described in paragraph (3).

17 (2) APPLICATIONS.—To be eligible to receive a
18 grant under this subsection, an eligible entity shall
19 submit to the Secretary a proposal at such time, in
20 such manner, and containing such information as
21 the Secretary may require.

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

1 (A) the effect of biochar on forest health
2 and resiliency, accounting for variations in
3 biochar, soil, climate, and other factors;

4 (B) the effect of biochar on soil health and
5 water retention, accounting for variations in
6 biochar, soil, climate, and other factors;

7 (C) the long-term carbon sequestration po-
8 tential of biochar;

9 (D) the best management practices of
10 biochar and biochar based-products to—

11 (i) maximize carbon sequestration
12 benefits; and

13 (ii) maximize the commercial viability
14 and application of such products in for-
15 estry, agriculture, environmental remedi-
16 ation, water quality improvement, and
17 other uses;

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

20 (i) uses in agriculture and environ-
21 mental remediation; and

22 (ii) use as a co-product in fuel produc-
23 tion;

24 (F) new and innovative uses from biochar
25 byproducts; and

1 (G) opportunities to expand markets for
2 biochar and create jobs, particularly in rural
3 areas.

4 (c) REPORTS.—

5 (1) REPORT TO CONGRESS.—Not later than 2
6 years after the date of the enactment of this section,
7 the Secretaries shall submit a report to Congress
8 that—

9 (A) includes policy and program rec-
10 ommendations to improve the widespread use of
11 biochar;

12 (B) identifies the areas of research needed
13 to advance biochar commercialization; and

14 (C) identifies barriers to further biochar
15 commercialization, including permitting and
16 siting considerations.

17 (2) PRESIDENT'S ANNUAL BUDGET REQUEST.—

18 Beginning 2 years after the date of the enactment
19 of this section and annually until the date described
20 in subsection (d), the Secretaries shall include in the
21 budget materials submitted to Congress in support
22 of the President's annual budget request (submitted
23 to Congress pursuant to section 1105 of title 31,
24 United States Code) for each fiscal year a report on
25 the status of the demonstration projects carried out

1 under subsection (a) and the research and develop-
2 ment grants carried out under subsection (b).

3 (d) SUNSET.—The authority to carry out this section
4 shall terminate on the date that is 7 years after the date
5 of the enactment of this section.

6 (e) DEFINITIONS.—In this section:

7 (1) BIOCHAR.—The term “biochar” means car-
8 bonized biomass produced by converting feedstock
9 through reductive thermal processing for non-fuel
10 uses.

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

13 (A) State, local, and Tribal governments;

14 (B) eligible institutions; and

15 (C) private, non-private, or cooperative en-
16 tities.

17 (3) ELIGIBLE INSTITUTION.—The term “eligi-
18 ble institution” means land-grant colleges and uni-
19 versities, including institutions eligible for funding
20 under the—

21 (A) Act of July 2, 1862;

22 (B) Act of August 30, 1890, including
23 Tuskegee University;

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

1 (D) Equity in Educational Land-Grant
2 Status Act of 1994 (7 U.S.C. 301 note).

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

7 (5) SECRETARIES.—The term “Secretaries”
8 means—

9 (A) the Secretary of Agriculture, acting
10 through the Chief of the Forest Service;

11 (B) the Secretary of the Interior, acting
12 through the Director of the Bureau of Land
13 Management; and

14 (B) the Secretary of Energy, acting
15 through the Director of the Office of Science.