

115TH CONGRESS
2D SESSION

H. R. 6457

To amend the Farm Security and Rural Investment Act of 2002 to advance carbon utilization technologies, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 19, 2018

Mr. PETERS (for himself and Mr. YOUNG of Iowa) introduced the following bill; which was referred to the Committee on Agriculture, and in addition to the Committees on Energy and Commerce, and Science, Space, and Technology, 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 amend the Farm Security and Rural Investment Act of 2002 to advance carbon utilization technologies, and for other purposes.

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

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Carbon Utilization Act
5 of 2018”.

1 **SEC. 2. BIOREFINERY, RENEWABLE CHEMICAL, AND**
2 **BIOBASED PRODUCT MANUFACTURING AS-**
3 **SISTANCE.**

4 Section 9003(b)(3) of the Farm Security and Rural
5 Investment Act of 2002 (7 U.S.C. 8103(b)(3)) is amend-
6 ed—

7 (1) in subparagraph (A), by striking “produces
8 an advanced biofuel; and” and inserting the fol-
9 lowing: “produces any 1 or more, or a combination,
10 of—

11 “(i) an advanced biofuel;

12 “(ii) a renewable chemical; or

13 “(iii) a biobased product”;

14 (2) in subparagraph (B), by striking “produces
15 an advanced biofuel.” and inserting the following:
16 “produces any 1 or more, or a combination, of—

17 “(i) an advanced biofuel;

18 “(ii) a renewable chemical; or

19 “(iii) a biobased product; and”;

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

21 “(C) a technology for the capture, com-
22 pression, or utilization of carbon dioxide that is
23 produced at a biorefinery producing an ad-
24 vanced biofuel, a renewable chemical, or a
25 biobased product.”.

1 **SEC. 3. BIOMASS RESEARCH AND DEVELOPMENT.**

2 Section 9008 of the Farm Security and Rural Invest-
3 ment Act of 2002 (7 U.S.C. 8108) is amended—

4 (1) in subsection (a)(1)—

5 (A) in subparagraph (A), by striking “or”
6 at the end;

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

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

10 “(C) carbon dioxide that—

11 “(i) is intended for permanent seques-
12 tration or utilization; and

13 “(ii) is a byproduct of the production
14 of the products described in subparagraphs
15 (A) and (B).”;

16 (2) in subsection (d)(2)(A)—

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

19 (B) by redesignating clause (xiii) as clause
20 (xiv); and

21 (C) by inserting after clause (xii) the fol-
22 lowing:

23 “(xiii) an individual with expertise in
24 carbon dioxide capture, utilization, and se-
25 questration; and”; and

26 (3) in subsection (e)—

1 (A) in paragraph (2)(B)—

2 (i) in clause (ii), by striking “and” at
3 the end; and

4 (ii) by adding at the end the fol-
5 lowing:

6 “(iv) to permanently sequester or uti-
7 lize carbon dioxide that is produced as a
8 byproduct of the production of biobased
9 products; and”; and

10 (B) in paragraph (3)(B)—

11 (i) in clause (i), by striking “and” at
12 the end;

13 (ii) in clause (ii), by striking the pe-
14 riod at the end and inserting “; and”; and

15 (iii) by adding at the end the fol-
16 lowing:

17 “(iii) the development of technologies
18 to permanently sequester or utilize carbon
19 dioxide that is produced as a byproduct of
20 the production of biobased products.”.

21 **SEC. 4. BIOGAS RESEARCH AND ADOPTION OF BIOGAS SYS-**
22 **TEMS.**

23 Title IX of the Farm Security and Rural Investment
24 Act of 2002 is amended by inserting after section 9011
25 (7 U.S.C. 8111) the following:

1 **“SEC. 9012. BIOGAS RESEARCH AND ADOPTION OF BIOGAS**
2 **SYSTEMS.**

3 “(a) DEFINITIONS.—In this section:

4 “(1) ANAEROBIC DIGESTION.—The term ‘an-
5 aerobic digestion’ means a biological process or se-
6 ries of biological processes—

7 “(A) through which microorganisms break
8 down biodegradable material in the absence of
9 oxygen; and

10 “(B) the end products of which are biogas
11 and digested materials.

12 “(2) BIOGAS.—The term ‘biogas’ means a mix-
13 ture of methane and carbon dioxide produced by the
14 bacterial decomposition of organic materials in the
15 absence of oxygen.

16 “(3) BIOGAS PROCESSING.—The term ‘biogas
17 processing’ means the process by which water, car-
18 bon dioxide, and other trace compounds are removed
19 from biogas, as determined by the end user.

20 “(4) BIOGAS SYSTEM.—The term ‘biogas sys-
21 tem’ means a system—

22 “(A) with the potential to capture and use
23 biogas, including biogas from organic waste, in-
24 cluding animal manure, food waste, waste from
25 landfills, and wastewater; and

26 “(B) that includes—

1 “(i) the infrastructure necessary to
2 manage the organic waste referred to in
3 subparagraph (A);

4 “(ii) the equipment necessary to gen-
5 erate—

6 “(I) electricity, heat, and fuel;

7 and

8 “(II) biogas system co-products;

9 and

10 “(iii) the equipment necessary for
11 biogas processing.

12 “(5) BIOGAS SYSTEM CO-PRODUCT.—The term
13 ‘biogas system co-product’ means a nonenergy
14 biogas system product produced from digested mate-
15 rial, including soil amendments, fertilizers, compost,
16 animal bedding, and feedstock for plastics and
17 chemicals.

18 “(6) DIGESTED MATERIAL.—The term ‘digested
19 material’ means solid or liquid digested material—

20 “(A) produced by digesters; and

21 “(B) that contains nutrients and organic
22 carbon.

23 “(b) INTERAGENCY BIOGAS OPPORTUNITIES TASK
24 FORCE.—

1 “(1) ESTABLISHMENT.—Not later than 180
2 days after the date of enactment of the Carbon Uti-
3 lization Act of 2018, the Secretary, acting jointly
4 with the Secretary of Energy and the Administrator,
5 shall establish an Interagency Biogas Opportunities
6 Task Force (referred to in this subsection as the
7 ‘Task Force’) that shall coordinate policies, pro-
8 grams, and research to accelerate—

9 “(A) biogas research; and

10 “(B) investment in cost-effective biogas
11 systems.

12 “(2) MEMBERSHIP.—The Task Force shall be
13 composed of—

14 “(A) the head of each Federal office re-
15 sponsible for biogas research or biogas system
16 financing (or a designee), including a represent-
17 ative from the Department of Agriculture, the
18 Department of Energy, and the Environmental
19 Protection Agency;

20 “(B) 1 or more representatives of State or
21 local governments, as determined by the Sec-
22 retary, the Secretary of Energy, and the Ad-
23 ministrator; and

24 “(C) 1 or more nongovernmental or indus-
25 try stakeholders, including 1 or more stake-

1 holders from the dairy and biogas industries, as
2 determined by the Secretary, the Secretary of
3 Energy, and the Administrator.

4 “(3) DUTIES OF THE TASK FORCE.—In car-
5 rying out paragraph (1), the Task Force shall—

6 “(A) evaluate and improve the coordination
7 of loan and grant programs of the Federal
8 agencies represented on the Task Force—

9 “(i) to broaden the financing options
10 available for biogas systems; and

11 “(ii) to enhance opportunities for pri-
12 vate financing of biogas systems;

13 “(B) review Federal procurement guide-
14 lines to ensure that products of biogas systems
15 are eligible for and promoted by applicable pro-
16 curement programs of the Federal Government;

17 “(C) in coordination with the Secretary of
18 Commerce, evaluate the development of North
19 American Industry Classification System and
20 North American Product Classification System
21 codes for biogas and biogas system products;

22 “(D) review opportunities and develop
23 strategies to overcome barriers to integrating
24 biogas into electricity and renewable natural
25 gas markets;

1 “(E) develop tools to broaden the market
2 for nonenergy biogas system products, including
3 by developing best management practices for—

4 “(i) the use and land application of
5 digestate; and

6 “(ii) the use of carbon dioxide from
7 biogas processing;

8 “(F) provide information on the ability of
9 biogas system products to participate in mar-
10 kets that provide environmental benefits;

11 “(G) identify and investigate research gaps
12 in biogas and anaerobic digestion technology,
13 including research gaps in environmental bene-
14 fits, market assessment, and performance
15 standards;

16 “(H) assess the most cost-effective vol-
17 untary investments in biogas to reduce waste
18 and methane emissions; and

19 “(I) identify and advance additional prior-
20 ities, as determined by the Task Force.

21 “(4) REPORT.—Not later than 18 months after
22 the date of the establishment of the Task Force, the
23 Task Force shall submit to Congress a report that—

1 “(A) describes the steps taken by the Task
2 Force to carry out the duties of the Task Force
3 under paragraph (3); and

4 “(B) identifies and prioritizes policies and
5 technology opportunities—

6 “(i) to expand the biogas industry;

7 “(ii) to eliminate barriers to invest-
8 ment in biogas systems in the landfill, live-
9 stock, wastewater, and other relevant sec-
10 tors; and

11 “(iii) to enhance opportunities for pri-
12 vate and public sector partnerships to fi-
13 nance biogas systems.

14 “(c) ADVANCEMENT OF BIOGAS RESEARCH.—

15 “(1) STUDY ON BIOGAS.—

16 “(A) IN GENERAL.—The Secretary, in co-
17 ordination with the Secretary of Energy and
18 the Administrator, shall enter into an agree-
19 ment with the National Renewable Energy Lab-
20 oratory to conduct a study relating to biogas.

21 “(B) STUDY.—Under the agreement de-
22 scribed in subparagraph (A), the study con-
23 ducted by the National Renewable Energy Lab-
24 oratory shall include an analysis of—

1 “(i) barriers to injecting biogas into
2 existing natural gas pipelines;

3 “(ii) methods for optimizing biogas
4 systems, including methods to obtain the
5 highest energy output from biogas, includ-
6 ing through the use of co-digestion;

7 “(iii) opportunities for, and barriers
8 to, the productive use of biogas system co-
9 products, carbon dioxide from biogas proc-
10 essing, and recovered nutrients;

11 “(iv) the optimal configuration of
12 local, State, or regional infrastructure for
13 the production of electricity, heat, or fuel
14 from biogas, including infrastructure for
15 the aggregation, cleaning, and pipeline in-
16 jection of biogas; and

17 “(v) any other subject relating to
18 biogas, as determined by the Interagency
19 Biogas Opportunities Task Force estab-
20 lished under subsection (b)(1).

21 “(C) REPORT.—Not later than 2 years
22 after the date of enactment of the Carbon Utili-
23 zation Act of 2018, the Secretary shall submit
24 to Congress a report on the study conducted
25 under this paragraph.

1 “(2) COLLECTION OF DATA FOR BIOGAS MAR-
2 KETS.—The Secretary, in coordination with the Sec-
3 retary of Energy and the Administrator, shall iden-
4 tify, collect, and analyze environmental, technical,
5 and economic performance data relating to biogas
6 systems, including the production of energy of
7 biogas systems, co-products, greenhouse gas and
8 other emissions, water quality benefits, and other
9 data necessary to develop markets for biogas and
10 biogas system co-products.”.

11 **SEC. 5. CARBON UTILIZATION EDUCATION PROGRAM.**

12 Title IX of the Farm Security and Rural Investment
13 Act of 2002 (7 U.S.C. 8101 et seq.) is amended by adding
14 at the end the following:

15 **“SEC. 9014. CARBON UTILIZATION EDUCATION PROGRAM.**

16 “(a) DEFINITIONS.—In this section:

17 “(1) CARBON DIOXIDE.—The term ‘carbon di-
18 oxide’ means carbon dioxide that is produced as a
19 byproduct of the production of a biobased product.

20 “(2) ELIGIBLE ENTITY.—The term ‘eligible en-
21 tity’ means an entity that—

22 “(A) is—

23 “(i) an organization described in sec-
24 tion 501(c)(3) of the Internal Revenue

1 Code of 1986 and exempt from taxation
2 under section 501(a) of such Code; or

3 “(ii) an institution of higher education
4 (as defined in section 101(a) of the Higher
5 Education Act of 1965 (20 U.S.C.
6 1001(a)));

7 “(B) has demonstrated knowledge about—

8 “(i) sequestration and utilization of
9 carbon dioxide; or

10 “(ii) aggregation of organic waste
11 from multiple sources into a single biogas
12 system; and

13 “(C) has a demonstrated ability to conduct
14 educational and technical support programs.

15 “(b) ESTABLISHMENT.—The Secretary, in consulta-
16 tion with the Secretary of Energy, shall make competitive
17 grants to eligible entities—

18 “(1) to provide education to the public about
19 the economic and emissions benefits of permanent
20 sequestration or utilization of carbon dioxide; or

21 “(2) to provide education to biogas producers
22 about opportunities for aggregation of organic waste
23 from multiple sources into a single biogas system.

24 “(c) FUNDING.—

1 “(1) MANDATORY FUNDING.—Of the funds of
2 the Commodity Credit Corporation, the Secretary
3 shall use for each of fiscal years 2019 through
4 2023—

5 “(A) \$1,000,000 to carry out subsection
6 (b)(1); and

7 “(B) \$1,000,000 to carry out subsection
8 (b)(2).

9 “(2) DISCRETIONARY FUNDING.—There are au-
10 thorized to be appropriated for each of fiscal years
11 2019 through 2023—

12 “(A) \$1,000,000 to carry out subsection
13 (b)(1); and

14 “(B) \$1,000,000 to carry out subsection
15 (b)(2).”.

16 **SEC. 6. CARBON CAPTURE, UTILIZATION, AND SEQUESTRA-**
17 **TION.**

18 (a) GENERAL AUTHORIZATION.—Notwithstanding
19 any other provision of law (including regulations), in car-
20 rying out any program pursuant to this Act or an amend-
21 ment made by this Act under which the Secretary of Agri-
22 culture provides a loan or loan guarantee, the Secretary
23 may provide such a loan or loan guarantee for carbon di-
24 oxide capture and utilization facilities employing commer-
25 cially demonstrated technologies.

1 (b) RURAL ELECTRIFICATION ASSISTANCE PRO-
2 GRAMS.—

3 (1) GENERAL AUTHORITY OF THE SECRETARY
4 OF AGRICULTURE.—Section 2(a) of the Rural Elec-
5 trification Act of 1936 (7 U.S.C. 902(a)) is amended
6 by striking “efficiency and conservation” and insert-
7 ing “efficiency, conservation, and carbon dioxide
8 capture and utilization”.

9 (2) AUTHORIZATION OF APPROPRIATIONS.—
10 Section 4(a) of the Rural Electrification Act of 1936
11 (7 U.S.C. 904(a)) is amended—

12 (A) by inserting “and related carbon diox-
13 ide capture and utilization facilities employing
14 commercially demonstrated technology” after
15 “generating plants”; and

16 (B) by striking “efficiency and conserva-
17 tion” and inserting “efficiency, conservation,
18 and carbon dioxide capture and utilization”.

19 (3) ENERGY GENERATION, TRANSMISSION, AND
20 DISTRIBUTION FACILITIES EFFICIENCY GRANTS AND
21 LOANS IN RURAL COMMUNITIES WITH EXTREMELY
22 HIGH ENERGY COSTS.—Section 19(a) of the Rural
23 Electrification Act of 1936 (7 U.S.C. 918a(a)) is
24 amended, in paragraphs (1) and (2), by inserting

1 “(including carbon capture and utilization)” after
2 “generation” each place it appears.

3 (c) RURAL AND REMOTE COMMUNITIES ELEC-
4 TRIFICATION GRANTS.—Section 609(c)(3) of the Public
5 Utility Regulatory Policies Act of 1978 (7 U.S.C.
6 918c(c)(3)) is amended by striking “preference to renew-
7 able energy facilities.” and inserting the following: “pref-
8 erence to—

9 “(A) renewable energy facilities; and
10 “(B) facilities for carbon capture and utili-
11 zation.”.

12 **SEC. 7. TECHNICAL ASSISTANCE FOR RURAL ELECTRIFICA-**
13 **TION LOANS.**

14 Section 2 of the Rural Electrification Act of 1936 (7
15 U.S.C. 902) is amended by adding at the end the fol-
16 lowing:

17 “(c) TECHNICAL ASSISTANCE.—

18 “(1) IN GENERAL.—Not later than 180 days
19 after the date of enactment of the Carbon Utiliza-
20 tion Act of 2018, the Secretary shall enter into a
21 memorandum of understanding with the Secretary of
22 Energy under which the Secretary of Energy shall
23 provide technical assistance to applicants for loans
24 made under subsection (a) and section 4(a).

1 “(2) FORM OF ASSISTANCE.—The technical as-
2 sistance that the Secretary may request pursuant to
3 a memorandum of understanding entered into under
4 paragraph (1) may include—

5 “(A) direct advice;

6 “(B) tools, maps, and training relating
7 to—

8 “(i) the implementation of demand-
9 side management of electric and telephone
10 service in rural areas;

11 “(ii) energy efficiency and conserva-
12 tion programs; and

13 “(iii) on-grid and off-grid renewable
14 energy systems; and

15 “(C) any other forms of assistance deter-
16 mined necessary by the Secretary.”.

○