

117TH CONGRESS
2D SESSION

H. R. 8013

To establish the Committee on Large-Scale Carbon Management in the Department of Energy and a Federal Carbon Removal Initiative, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JUNE 9, 2022

Ms. KUSTER (for herself and Mr. GONZALEZ of Ohio) introduced the following bill; which was referred to the Committee on Science, Space, and Technology, and in addition to the Committee on Energy and Commerce, 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 the Committee on Large-Scale Carbon Management in the Department of Energy and a Federal Carbon Removal Initiative, 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 “Removing Emissions
5 to Mend Our Vulnerable Earth Act of 2022” or the “RE-
6 MOVE Act of 2022”.

1 **SEC. 2. COMMITTEE ON LARGE-SCALE CARBON MANAGE-**
2 **MENT AND FEDERAL CARBON REMOVAL INI-**
3 **TIATIVE.**

4 (a) DEFINITION OF CARBON DIOXIDE REMOVAL.—

5 In this section, the term “carbon dioxide removal” means
6 the capture of carbon dioxide directly from ambient air
7 or, in dissolved form, from seawater, combined with the
8 sequestration of such carbon dioxide, including through—

9 (1) direct air capture and sequestration;

10 (2) enhanced carbon mineralization;

11 (3) bioenergy with carbon capture and seques-
12 tration;

13 (4) forest restoration;

14 (5) soil carbon management;

15 (6) ocean-based carbon removal; and

16 (7) any other approaches or methods identified
17 by the Committee.

18 (b) COMMITTEE ON LARGE-SCALE CARBON MANAGE-
19 MENT.—

20 (1) ESTABLISHMENT.—

21 (A) IN GENERAL.—There is established in
22 the Department of Energy, Office of Undersec-
23 retary for Science and Energy a committee on
24 matters relating to large-scale carbon manage-
25 ment.

1 (B) DESIGNATION.—The committee estab-
2 lished by subparagraph (A) shall be known as
3 the “Committee on Large-Scale Carbon Man-
4 agement” (in this section referred to as the
5 “Committee”).

6 (C) MEMBERSHIP.—

7 (i) COMPOSITION.—The Committee
8 shall be composed of the members of the
9 executive committee established under sub-
10 section (c)(1) and such other members as
11 the executive committee considers appro-
12 priate.

13 (ii) COCHAIRPERSONS.—The members
14 of the executive committee established by
15 subsection (c)(1) shall be cochairpersons of
16 the Committee.

17 (2) DUTIES OF THE COMMITTEE.—The duties
18 of the Committee shall be as follows:

19 (A) Developing a strategic plan for Federal
20 experimenting, prototyping, and production of
21 technological carbon dioxide removal (CDR)
22 and sequestration.

23 (B) Overseeing working groups established
24 under subsection (d).

1 (C) Coordinating budget planning with the
2 Federal agencies and budget review with the
3 Office of Management and Budget for matters
4 relating to experimenting, prototyping, and pro-
5 duction described in subparagraph (A).

6 (D) Identifying cost-effective carbon diox-
7 ide removal technologies that are suitable for
8 large-scale production.

9 (E) Evaluating carbon dioxide removal
10 monitoring activities, data collection on carbon
11 emissions and sinks, and long-term storage pro-
12 tocols for carbon dioxide removal strategies.

13 (F) Overseeing independent evaluations of
14 performance of the working groups established
15 under subsection (d).

16 (G) Monitoring the long-term carbon and
17 environmental impacts of carbon dioxide re-
18 moval.

19 (H) Evaluating socio-economic and com-
20 munity impacts resulting from the application
21 of carbon dioxide removal technologies and de-
22 veloping protocols for effective community en-
23 gagement, with an emphasis on outreach to dis-
24 tressed and unrepresented groups.

25 (c) EXECUTIVE COMMITTEE.—

1 (1) ESTABLISHMENT.—There is established in
2 the Committee an executive committee.

3 (2) MEMBERSHIP.—The executive committee
4 shall be composed of the following:

5 (A) The Associate Director for Science of
6 the Office of Science and Technology Policy.

7 (B) One senior official of the Department
8 of Energy selected by the Secretary of Energy.

9 (C) One senior official of the Department
10 of Agriculture selected by the Secretary of Agri-
11 culture.

12 (D) One senior official of the Department
13 of Defense selected by the Secretary of Defense.

14 (E) One senior official of the National
15 Oceanic and Atmospheric Administration se-
16 lected by the Administrator of the National
17 Oceanic and Atmospheric Administration.

18 (F) One senior official of the Environ-
19 mental Protection Agency selected by the Ad-
20 ministrator of the Environmental Protection
21 Agency.

22 (d) WORKING GROUPS AND CARBON REMOVAL INI-
23 TIATIVE.—

24 (1) ESTABLISHMENT.—

1 (A) IN GENERAL.—The Committee shall
2 establish working groups which shall carry out
3 an initiative on technological and detailed ex-
4 perimenting, prototyping, and production of
5 carbon dioxide removal technology.

6 (B) DESIGNATION OF INITIATIVE.—The
7 initiative carried out under subparagraph (A)
8 shall be known as the “Carbon Removal Initia-
9 tive”.

10 (2) WORKING GROUP FOCI.—The working
11 groups established under paragraph (1) are as fol-
12 lows:

13 (A) OCEANS.—

14 (i) IN GENERAL.—One working group
15 to focus on matters relating to carbon di-
16 oxide removal from the oceans and coastal
17 regions.

18 (ii) MEMBERSHIP.—The working
19 group described in clause (i) shall be com-
20 posed of 9 members as follows:

21 (I) One individual selected by the
22 Administrator of the National Oceanic
23 and Atmospheric Administration from
24 among employees of the National Oce-
25 anic and Atmospheric Administration.

1 (II) One individual selected by
2 the Administrator of the National
3 Aeronautics and Space Administration
4 from among employees of the Na-
5 tional Aeronautics and Space Admin-
6 istration.

7 (III) One individual selected by
8 the Secretary of Defense from among
9 employees of the Department of De-
10 fense.

11 (IV) One individual selected by
12 the Director of the National Science
13 Foundation from among employees of
14 the National Science Foundation.

15 (V) Two individuals selected by
16 the Secretary of the Interior from
17 among employees of the Department
18 of the Interior.

19 (VI) One individual selected by
20 the Administrator of the Environ-
21 mental Protection Agency from among
22 employees of the Environmental Pro-
23 tection Agency.

24 (VII) One individual selected by
25 the Secretary of Energy from among

1 employees of the Department of En-
2 ergy.

3 (VIII) One individual selected by
4 the Chair of the Council on Environ-
5 mental Quality from among employees
6 on the Council on Environmental
7 Quality.

8 (iii) COCHAIRPERSONS.—The individ-
9 uals selected under subclauses (I) and (IV)
10 of clause (ii) shall serve as cochairpersons
11 of the working group established under
12 clause (i).

13 (B) TERRESTRIAL.—

14 (i) IN GENERAL.—One working group
15 to focus on terrestrial and biological mat-
16 ters relating to carbon dioxide removal.

17 (ii) MEMBERSHIP.—The working
18 group described in clause (i) shall be com-
19 posed of 7 members as follows:

20 (I) Two individuals, one of whom
21 shall be selected by the Secretary of
22 Agriculture from among employees of
23 the Department of Agriculture and
24 one of whom shall be selected by chief

1 of the Forest Service from among em-
2 ployees of the Forest Service.

3 (II) One individual selected by
4 the Secretary of Energy from among
5 employees of the Department of En-
6 ergy.

7 (III) One individual selected by
8 the Secretary of the Interior from
9 among employees of the Department
10 of the Interior.

11 (IV) One individual selected by
12 the Director of the National Science
13 Foundation from among employees of
14 the National Science Foundation.

15 (V) One individual selected by
16 the Administrator of the Environ-
17 mental Protection Agency from among
18 employees of the Environmental Pro-
19 tection Agency.

20 (VI) One individual selected by
21 the Chair of the Council on Environ-
22 mental Quality from among employees
23 of the Council on Environmental
24 Quality.

1 (iii) COCHAIRPERSONS.—The individ-
2 uals selected under subclauses (I) and (II)
3 of clause (ii) shall serve as cochairpersons
4 of the working group established under
5 clause (i).

6 (C) GEOLOGICAL.—

7 (i) IN GENERAL.—One working group
8 to focus on geological matters relating to
9 carbon dioxide removal and storage.

10 (ii) MEMBERSHIP.—The working
11 group described in clause (i) shall be com-
12 posed of 6 members as follows:

13 (I) One individual selected by the
14 Secretary of Energy from among em-
15 ployees of the Department of Energy.

16 (II) Two individuals selected by
17 the Secretary of the Interior, one from
18 among the employees of the United
19 States Geological Survey and one
20 from among the employees of the Bu-
21 reau of Ocean Energy and Manage-
22 ment.

23 (III) One individual selected by
24 the Director of the National Science

1 Foundation from among employees of
2 the National Science Foundation.

3 (IV) One individual selected by
4 the Administrator of the Environ-
5 mental Protection Agency from among
6 employees of the Environmental Pro-
7 tection Agency.

8 (V) One individual selected by
9 the Chair of the Council on Environ-
10 mental Quality from among employees
11 of the Council on Environmental
12 Quality.

13 (iii) COCHAIRPERSONS.—The individ-
14 uals selected under subclauses (I) and (II)
15 of clause (ii) shall serve as cochairpersons
16 of the working group established under
17 clause (i).

18 (D) TECHNOLOGICAL.—

19 (i) IN GENERAL.—One working group
20 to focus on technological matters relating
21 to carbon dioxide removal.

22 (ii) MEMBERSHIP.—The working
23 group described in clause (i) shall be com-
24 posed of 8 members as follows:

1 (I) One individual selected by the
2 Secretary of Energy from among em-
3 ployees of the Department of Energy.

4 (II) One individual selected by
5 the Secretary of Defense from among
6 employees of the Department of De-
7 fense.

8 (III) One individual selected by
9 the Administrator of the National
10 Aeronautics and Space Administration
11 from among employees of the Na-
12 tional Aeronautics and Space Admin-
13 istration.

14 (IV) One individual selected by
15 the Director of the National Science
16 Foundation from among employees of
17 the National Science Foundation.

18 (V) One individual selected by
19 the Secretary of Commerce from
20 among employees of the National In-
21 stitute of Standards and Technology.

22 (VI) One individual selected by
23 the Administrator of the Environ-
24 mental Protection Agency from among

1 employees of the Environmental Pro-
2 tection Agency.

3 (VII) One individual selected by
4 the Secretary of Transportation from
5 among employees of the Department
6 of Transportation.

7 (VIII) One individual selected by
8 the Chair of the Council on Environ-
9 mental Quality from among employees
10 of the Council on Environmental
11 Quality.

12 (iii) COCHAIRPERSONS.—The individ-
13 uals selected under subclauses (I) and (III)
14 of clause (ii) shall serve as cochairpersons
15 of the working group established under
16 clause (i).

17 (e) ANNUAL BUDGET CROSSCUT REVIEW.—

18 (1) IN GENERAL.—Not less frequently than
19 once each year, the Director of the Office of Man-
20 agement and Budget shall assist in the coordination
21 of the initiative carried out under subsection
22 (d)(1)(A) by conducting a budget crosscut review—

23 (A) to ensure that budget proposals from
24 members of the working groups established
25 under such subsection are integrated with the

1 overall budget for each Federal department and
2 agency participating in such working groups;
3 and

4 (B) to ensure that the various staff of the
5 Office of Management and Budget review and
6 act on Federal department and agency budget
7 proposals for experimenting, prototyping, and
8 production of carbon dioxide removal technology
9 in a holistic fashion.

10 (2) TECHNICAL ASSISTANCE.—The committee
11 shall provide such technical assistance and advice on
12 research priorities to the Director of the Office of
13 Budget and Management as requested.

14 (3) SUBMITTAL TO CONGRESS.—Along with
15 each submission of the President pursuant to section
16 1105 of title 31, United States Code, the Director
17 of the Office of Management and Budget shall sub-
18 mit to Congress a report on the findings of the Di-
19 rector with respect to the most recently completed
20 budget crosscut review under paragraph (1).

21 (f) COORDINATION.—In carrying out this Act, the
22 Committee shall—

23 (1) coordinate and seek to avoid duplication
24 with other programs of the Department of Energy
25 and other Federal agencies on the Committee;

1 (2) coordinate and collaborate with the Carbon
2 Dioxide Removal Task Force and U.S. Global
3 Change Research Program; and

4 (3) to the maximum extent practicable, leverage
5 existing resources and programs of the Department
6 of Energy and other Federal agencies on the Com-
7 mittee.

8 (g) ADMINISTRATIVE SUPPORT.—The Department of
9 Energy, Office of the Undersecretary for Science and En-
10 ergy, shall provide such administrative support for the
11 Committee as required.

12 (h) CARBON ACCOUNTING COORDINATION WORKING
13 GROUP AND DATA PLAN.—

14 (1) FINDINGS.—Congress finds that—

15 (A) multiple Federal agencies and pro-
16 grams collect data on carbon emissions and
17 sinks related to carbon dioxide removal;

18 (B) Federal carbon emissions and sinks
19 data collection efforts are siloed, with different
20 methodological approaches to collection, mul-
21 tiple data warehouse locations, potential
22 redundancies in data collected, and gaps in cov-
23 erage; and

24 (C) improved coordination of carbon meas-
25 urement, monitoring, and data aggregation re-

1 lated to carbon dioxide removal is needed to
2 support the development and deployment of car-
3 bon dioxide removal methods and strategies at
4 scale.

5 (2) OBJECTIVE.—The objective of this sub-
6 section is to establish a comprehensive, multi-agency
7 plan for the collection and management of data on
8 carbon emissions and sinks related to carbon dioxide
9 removal that—

10 (A) enables comprehensive reporting on
11 carbon dioxide removal based on full and con-
12 sistent integration with existing relevant data
13 collection efforts across the Federal Govern-
14 ment; and

15 (B) provides policymakers with information
16 on the effectiveness of carbon dioxide removal
17 and carbon sequestration activities.

18 (3) ESTABLISHMENT.—The executive com-
19 mittee shall establish a working group on carbon di-
20 oxide removal-related data collection and manage-
21 ment.

22 (4) DATA PLAN ELEMENTS.—The working
23 group established in paragraph (3) shall develop a
24 data plan that includes—

1 (A) an inventory of existing Federal data
2 sources on carbon emissions and sinks related
3 to carbon dioxide removal;

4 (B) a description of the scope of activities
5 for which new data on emissions and sinks re-
6 lated to carbon dioxide removal should be col-
7 lected;

8 (C) methodologies for collection of carbon
9 dioxide removal-related data;

10 (D) the roles of the respective Federal
11 agencies in collection and management of car-
12 bon dioxide removal-related data in meeting
13 agency-specific mission requirements in coordi-
14 nation with governmentwide comprehensive car-
15 bon accounting objectives; and

16 (E) data collection and management proto-
17 cols and practices to facilitate integration of
18 data on emissions and sinks related to carbon
19 dioxide removal into comprehensive reports on
20 carbon removal and accounting on a nationwide
21 scale.

22 (5) CONSIDERATIONS.—The data plan shall, at
23 a minimum, consider and address—

24 (A) the role of existing programs that doc-
25 ument carbon emissions and sinks, including

1 but not limited to the U.S. Global Change Re-
2 search Program and the Environmental Protec-
3 tion Agency’s Greenhouse Gas Reporting Pro-
4 gram;

5 (B) how the effectiveness of carbon dioxide
6 removal projects (as defined by the Committee)
7 can be tracked and effectively managed over
8 time;

9 (C) gaps in existing Federal data collection
10 efforts that delay progress on carbon dioxide re-
11 moval experimenting, prototyping, and produc-
12 tion;

13 (D) how data collection on carbon dioxide
14 removal projects could incorporate best prac-
15 tices for the accounting of—

16 (i) additionality, which is the counter-
17 factual assessment of carbon dioxide emit-
18 ted without the occurrence of a carbon di-
19 oxide removal practice;

20 (ii) permanence, which is an assess-
21 ment of the time scale of climate impacts
22 for a carbon dioxide removal practice in
23 comparison to the time scale of greenhouse
24 gases impacting climate change;

1 (iii) risk of reversal, which is a prob-
2 abilistic assessment of a carbon dioxide re-
3 moval practice storing carbon for a shorter
4 period of time than the time scale identi-
5 fied in clause (ii);

6 (iv) lifecycle environmental, socio-eco-
7 nomic, and community impacts of a carbon
8 dioxide removal practice; and

9 (v) transparency, which is the ability
10 for the public to easily access information
11 regarding carbon dioxide removal practices,
12 including information listed in this sub-
13 paragraph; and

14 (E) how the gaps identified in subpara-
15 graph (C) can be remedied to ensure the quali-
16 ties listed in subparagraph (D) are measured,
17 potentially through the consolidation of re-
18 sources or the creation of a new database in-
19 tended for supporting carbon dioxide removal
20 over time.

21 (6) REPORTS.—

22 (A) EXPERT PARTICIPATION.—The work-
23 ing group shall establish a process for engage-
24 ment with the scientific community and stake-

1 holder groups in the development of the data
2 plan.

3 (B) PUBLIC REVIEW.—Within 180 days of
4 enactment of this subsection, the Committee
5 shall make available a draft report for public
6 review and comment. The working group shall
7 consider public comments in the process of fi-
8 nalizing the data plan.

9 (C) REPORTS TO CONGRESS.—

10 (i) Not later than 1 year after the
11 date of enactment of this subsection, the
12 executive committee shall submit to Con-
13 gress the initial data plan.

14 (ii) Along with each submission of the
15 President pursuant to section 1105 of title
16 31, United States Code, the executive com-
17 mittee shall submit to Congress a report
18 on the findings of the Committee with re-
19 spect to implementation of the data plan
20 along with any recommendations for modi-
21 fication of the plan.

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