

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.

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## 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

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## 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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