

117TH CONGRESS  
1ST SESSION

# S. 843

To establish the Committee on Large-Scale Carbon Management in the National Science and Technology Council and a Federal Carbon Removal Initiative, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

MARCH 18, 2021

Ms. SINEMA (for herself, Ms. MURKOWSKI, Mr. WHITEHOUSE, and Mrs. CAPITO) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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## A BILL

To establish the Committee on Large-Scale Carbon Management in the National Science and Technology Council 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 “Carbon Removal, Effi-  
5 cient Agencies, Technology Expertise Act of 2021” or the  
6 “CREATE Act of 2021”.

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; and  
15 (6) direct ocean capture.

16 (b) COMMITTEE ON LARGE-SCALE CARBON MANAGE-  
17 MENT.—

18 (1) ESTABLISHMENT.—

19 (A) IN GENERAL.—There is established in  
20 the National Science and Technology Council a  
21 committee on matters relating to large-scale  
22 management of carbon.

23 (B) DESIGNATION.—The committee estab-  
24 lished by subparagraph (A) shall be known as  
25 the “Committee on Large-Scale Carbon Man-  
26 agement” (in this section the “Committee”).

1 (C) MEMBERSHIP.—

2 (i) COMPOSITION.—The Committee  
3 shall be composed of the members of the  
4 executive committee established under sub-  
5 section (c)(1) and such other members as  
6 the executive committee considers appro-  
7 priate.

8 (ii) COCHAIRPERSONS.—The members  
9 of the executive committee established by  
10 subsection (c)(1) shall be cochairpersons of  
11 the Committee.

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

14 (A) Developing a strategic plan for Federal  
15 research, development, and demonstration of  
16 technological carbon dioxide removal (CDR)  
17 and storage.

18 (B) Overseeing working groups established  
19 under subsection (d).

20 (C) Coordinating budget planning with the  
21 Federal agencies and budget review with the  
22 Office of Management and Budget for matters  
23 relating to research, development, and dem-  
24 onstration described in subparagraph (A).

1           (D) Identifying cost-effective carbon diox-  
2           ide removal technologies that are suitable for  
3           large-scale demonstration.

4           (E) Identifying accurate monitoring, car-  
5           bon dioxide data collection, and long-term stor-  
6           age protocols for carbon dioxide removal tech-  
7           nologies.

8           (F) Overseeing independent evaluations of  
9           performance of the working groups established  
10          under subsection (d).

11       (c) EXECUTIVE COMMITTEE.—

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

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

16           (A) The Associate Director for Science of  
17          the Office of Science and Technology Policy.

18           (B) One senior official of the Department  
19          of Energy selected by the Secretary of Energy.

20           (C) One senior official of the Department  
21          of Agriculture selected by the Secretary of Agri-  
22          culture.

23           (D) One senior official of the Department  
24          of Defense selected by the Secretary of Defense.

1           (E) One senior official of the National  
2           Oceanic and Atmospheric Administration se-  
3           lected by the Administrator of the National  
4           Oceanic and Atmospheric Administration.

5           (d) WORKING GROUPS AND CARBON REMOVAL INI-  
6           TIATIVE.—

7           (1) ESTABLISHMENT.—

8           (A) IN GENERAL.—The Committee shall  
9           establish working groups which shall carry out  
10          an initiative on technological and detailed re-  
11          search, development, and demonstration of car-  
12          bon dioxide removal technology.

13          (B) DESIGNATION OF INITIATIVE.—The  
14          initiative carried out under subparagraph (A)  
15          shall be known as the “Carbon Removal Initia-  
16          tive”.

17          (2) WORKING GROUP FOCI.—The working  
18          groups established under paragraph (1) are as fol-  
19          lows:

20          (A) OCEANS.—

21               (i) IN GENERAL.—One working group  
22               to focus on matters relating to carbon di-  
23               oxide removal from the oceans and coastal  
24               regions.

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

4 (I) One individual selected by the  
5 Administrator of the National Oceanic  
6 and Atmospheric Administration from  
7 among employees of the National Ocea-  
8 nic and Atmospheric Administration.

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

15 (III) One individual selected by  
16 the Secretary of Defense from among  
17 employees of the Department of De-  
18 fense.

19 (IV) One individual selected by  
20 the Director of the National Science  
21 Foundation from among employees of  
22 the National Science Foundation.

23 (V) Two individuals selected by  
24 the Secretary of the Interior from

1 among employees of the Department  
2 of the Interior.

3 (VI) 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 (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 6 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 the  
25 Chief of the Forest Service from

1 among employees of the Forest Serv-  
2 ice.

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 (iii) COCHAIRPERSONS.—The individ-  
21 uals selected under subclauses (I) and (II)  
22 of clause (ii) shall serve as cochairpersons  
23 of the working group established under  
24 clause (i).

25 (C) GEOLOGICAL.—



1 (i) IN GENERAL.—One working group  
2 to focus on geological matters relating to  
3 carbon dioxide removal and storage.

4 (ii) MEMBERSHIP.—The working  
5 group described in clause (i) shall be com-  
6 posed of 4 members as follows:

7 (I) One individual selected by the  
8 Secretary of Energy from among em-  
9 ployees of the Department of Energy.

10 (II) One individual selected by  
11 the Secretary of the Interior from  
12 among employees of the United States  
13 Geological Survey.

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

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

23 (iii) COCHAIRPERSONS.—The individ-  
24 uals selected under subclauses (I) and (II)  
25 of clause (ii) shall serve as cochairpersons

1 of the working group established under  
2 clause (i).

3 (D) TECHNOLOGICAL.—

4 (i) IN GENERAL.—One working group  
5 to focus on technological matters relating  
6 to carbon dioxide removal.

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

10 (I) One individual selected by the  
11 Secretary of Energy from among em-  
12 ployees of the Department of Energy.

13 (II) One individual selected by  
14 the Secretary of Defense from among  
15 employees of the Department of De-  
16 fense.

17 (III) One individual selected by  
18 the Administrator of the National  
19 Aeronautics and Space Administration  
20 from among employees of the Na-  
21 tional Aeronautics and Space Admin-  
22 istration.

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

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

3 (V) One individual selected by  
4 the Secretary of Commerce from  
5 among employees of the National In-  
6 stitute of Standards and Technology.

7 (VI) One individual selected by  
8 the Administrator of the Environ-  
9 mental Protection Agency from among  
10 employees of the Environmental Pro-  
11 tection Agency.

12 (VII) One individual selected by  
13 the Secretary of Transportation from  
14 among employees of the Department  
15 of Transportation.

16 (iii) COCHAIRPERSONS.—The individ-  
17 uals selected under subclauses (I) and (III)  
18 of clause (ii) shall serve as cochairpersons  
19 of the working group established under  
20 clause (i).

21 (e) ANNUAL BUDGET CROSSCUT REVIEW.—

22 (1) IN GENERAL.—Not less frequently than  
23 once each year, the Director of the Office of Man-  
24 agement and Budget shall assist in the coordination

1 of the initiative carried out under subsection  
2 (d)(1)(A) by conducting a budget crosscut review—

3 (A) to ensure that budget proposals from  
4 members of the working groups established  
5 under such subsection are integrated with the  
6 overall budget for each Federal department and  
7 agency participating in such working groups;  
8 and

9 (B) to ensure that the various staff of the  
10 Office of Management and Budget review and  
11 act on Federal department and agency budget  
12 proposals for research, development, and dem-  
13 onstration of carbon dioxide removal technology  
14 in a holistic fashion.

15 (2) SUBMITTAL TO CONGRESS.—Along with  
16 each submission of the President pursuant to section  
17 1105 of title 31, United States Code, the Director  
18 shall submit to Congress a report on the findings of  
19 the Director with respect to the most recently com-  
20 pleted budget crosscut review under paragraph (1).

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