

*Edward J. Markey*

116TH CONGRESS  
1ST SESSION

**S.** \_\_\_\_\_

To authorize the National Oceanic and Atmospheric Administration to establish a Climate Change Education Program, and for other purposes.

IN THE SENATE OF THE UNITED STATES

*for himself and*

Mr. MARKEY introduced the following bill, which was read twice and referred to the Committee on \_\_\_\_\_

*Ms. Harris  
Ms. Warren  
Mr. Van Hollen  
Ms. Shaheen  
Ms. Klobuchar  
Mr. Merkley  
Ms. Gillibrand  
Mr. Wyden  
Ms. Feinstein  
Mr. Blumenthal  
Mr. Booker  
Mr. Sanders  
Mr. Cardin  
Ms. Hirono  
Mr. Leahy*

**A BILL**

To authorize the National Oceanic and Atmospheric Administration to establish a Climate Change Education Program, and for other purposes.

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

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the "Climate Change Edu-  
5 cation Act".

6 **SEC. 2. FINDINGS.**

7 Congress makes the following findings:

8 (1) The evidence for human-induced climate  
9 change is overwhelming and undeniable.

1           (2) Atmospheric carbon can be significantly re-  
2           duced through conservation, by shifting to renewable  
3           energy sources such as solar, wind, tidal, and geo-  
4           thermal, and by increasing the efficiency of build-  
5           ings, including domiciles, and transportation.

6           (3) Providing clear information about climate  
7           change, in a variety of forms, can remove the fear  
8           and the sense of helplessness, and encourage individ-  
9           uals and communities to take action.

10          (4) Implementation of measures that promote  
11          energy efficiency, conservation, and renewable en-  
12          ergy will greatly reduce human impact on the envi-  
13          ronment.

14          (5) Informing people of new technologies and  
15          programs as they become available will ensure max-  
16          imum understanding and maximum effect of those  
17          measures.

18          (6) More than 3,000,000 students graduate  
19          from high schools and colleges each year, armed  
20          with attitudes, skills, and knowledge about the cli-  
21          mate that inform their actions.

22          (7) The effect on the climate, positive or nega-  
23          tive, of each of those 3,000,000 students lasts be-  
24          yond a lifetime.

1           (8) Those students need to be prepared to im-  
2           plement changes in professional and personal prac-  
3           tices, to support and help develop new technology  
4           and policy, and to address the coming social and  
5           economic challenges and opportunities arising from a  
6           changing climate.

7           (9) It has been demonstrated that the people of  
8           the United States overwhelmingly support teaching  
9           students about the causes, consequences, and poten-  
10          tial solutions to climate change in all 50 States and  
11          more than 3,000 counties across the United States.

12          (10) Only 30 percent of middle school and 45  
13          percent of high school science teachers understand  
14          the extent of the scientific consensus on climate  
15          change.

16 **SEC. 3. DEFINITIONS.**

17          In this Act:

18           (1) CLIMATE CHANGE EDUCATION.—The term  
19           “climate change education” means informal and for-  
20           mal interdisciplinary learning at all age levels  
21           about—

22                   (A) climate change, climate adaptation and  
23                   mitigation, and climate resilience; and

24                   (B) the effects of climate change, climate  
25                   adaptation and mitigation, and climate resil-

1           ience on the environmental, energy, social, and  
2           economic systems of the United States.

3           (2) GREEN COLLAR JOB.—The term “green col-  
4           lar job” means a job—

5                   (A) in a business that produces goods or  
6                   provides services that benefit the environment  
7                   or conserve natural resources; or

8                   (B) in which the duties of the worker in-  
9                   volve making the production processes of the  
10                  employer more environmentally friendly or use  
11                  fewer natural resources.

12           (3) GREEN ECONOMY.—The term “green econ-  
13           omy” means an economy that results in improved  
14           human well-being and social equity by significantly  
15           reducing environmental risks and ecological scar-  
16           cities.

17           (4) INSTITUTION OF HIGHER EDUCATION.—The  
18           term “institution of higher education” has the  
19           meaning given the term in section 102 of the Higher  
20           Education Act of 1965 (20 U.S.C. 1002).

21           (5) LOCAL EDUCATIONAL AGENCY; STATE EDU-  
22           CATIONAL AGENCY.—The terms “local educational  
23           agency” and “State educational agency” have the  
24           meanings given those terms in section 8101 of the

1 Elementary and Secondary Education Act of 1965  
2 (20 U.S.C. 7801).

3 (6) NONPROFIT ORGANIZATION.—The term  
4 “nonprofit organization” means an organization de-  
5 scribed in section 501(c)(3) of the Internal Revenue  
6 Code of 1986 and exempt from taxation under  
7 501(a) of that Code.

8 **SEC. 4. CLIMATE CHANGE EDUCATION PROGRAM.**

9 The Administrator of the National Oceanic and At-  
10 mospheric Administration shall establish a Climate  
11 Change Education Program to—

12 (1) increase the climate literacy of the United  
13 States by broadening the understanding of climate  
14 change, including possible long-term and short term  
15 consequences and potential solutions;

16 (2) apply the latest scientific and technological  
17 discoveries, including through the use of the sci-  
18 entific assets of the Administration, to provide for-  
19 mal and informal learning opportunities to individ-  
20 uals of all ages, including individuals of diverse cul-  
21 tural and linguistic backgrounds; and

22 (3) emphasize actionable information to help  
23 people understand and promote implementation of  
24 new technologies, programs, and incentives related

1 to climate change, climate adaptation and mitiga-  
2 tion, and climate resilience.

3 **SEC. 5. GRANT PROGRAM.**

4 (a) IN GENERAL.—As part of the Climate Change  
5 Education Program established under section 4, the Ad-  
6 ministrator of the National Oceanic and Atmospheric Ad-  
7 ministration shall establish a program to make grants—

8 (1) to States to encourage and support plans  
9 and programs for kindergarten through grade 12  
10 formal and informal climate change education—

11 (A) to ensure that students graduate from  
12 high school with high climate literacy, includ-  
13 ing—

14 (i) relevant teacher training and pro-  
15 fessional development;

16 (ii) science, technology, engineering,  
17 arts and design, and mathematics edu-  
18 cation; and

19 (iii) interdisciplinary studies; and

20 (B) with a particular focus on programs  
21 that advance widespread State and local edu-  
22 cational agency adoption of climate change edu-  
23 cation, including funding for State educational  
24 agencies in partnership with local educational  
25 agencies and local nonprofit organizations to—

1 (i) integrate key principles of climate  
2 change education into existing kinder-  
3 garten through grade 12 State academic  
4 content standards, student academic  
5 achievement standards, or State cur-  
6 riculum frameworks;

7 (ii) create model State climate change  
8 curricula;

9 (iii) develop and implement State  
10 teacher training programs; and

11 (iv) support secondary school prepara-  
12 tion or work-based experiences in green  
13 collar jobs; and

14 (2) to institutions of higher education to—

15 (A) improve the quality of and access to  
16 training, certification, and higher education for  
17 green collar jobs in the future green economy,  
18 such as green construction, design, technology,  
19 health, engineering, business, and policy stud-  
20 ies, including sustainability science, and with a  
21 particular focus on programs that address re-  
22 structuring institutional incentives and reducing  
23 institutional barriers to widespread faculty  
24 adoption of interdisciplinary teaching of climate  
25 change education; and

1           (B) engage teams of faculty and students  
2           to develop applied climate research and deliver  
3           to local communities direct services related to  
4           local climate mitigation and adaptation issues,  
5           with a priority focus on communities impacted  
6           by climate change; and

7           (3) to professional associations for projects that  
8           build capacity at the State and national levels for  
9           continuing education by practicing professionals and  
10          the general public in green economy fields.

11          (b) CLIMATE CHANGE EDUCATION OFFICE.—There  
12          shall be, within the Office of Education of the National  
13          Oceanic and Atmospheric Administration, a Climate  
14          Change Education Office to administer the grant program  
15          required by subsection (a).

16          **SEC. 6. REPORT.**

17          Not later than one year after the date of the enact-  
18          ment of this Act, and annually thereafter, the Adminis-  
19          trator of the National Oceanic and Atmospheric Adminis-  
20          tration shall submit to Congress a report that evaluates  
21          the scientific merits, educational effectiveness, and broad-  
22          er effects of activities carried out under this Act.

23          **SEC. 7. AUTHORIZATION OF APPROPRIATIONS.**

24          There are authorized to be appropriated to the Na-  
25          tional Oceanic and Atmospheric Administration



1 \$20,000,000 for each of fiscal years 2020 through 2025

2 to carry out this Act.