115th Congress 2d 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	
Mr. Markey introduced the following bill; which was read twice and refer to the Committee on	red
A BILL To authorize the National Oceanic and Atmospheric Admir	nis-
tration to establish a Climate Change Education F gram, and for other purposes.	ro-
1 Be it enacted by the Senate and House of Represen	ıta-
2 tives of the United States of America in Congress assemb	led,
3 SECTION 1. SHORT TITLE.	
4 This Act may be cited as the "Climate Change E	du-
5 cation Act".	
6 SEC. 2. FINDINGS.	
7 Congress makes the following findings:	

(1) The evidence for human-induced climate

change is overwhelming and undeniable.

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9

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 2019 through 2024

2 to carry out this Act.