Be it enacted by the Senate and House of Representa-
tives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) Short Title.—This Act may be cited as the
“Climate Solutions Act of 2021”.

(b) Table of Contents.—The table of contents for
this Act is as follows:

Sec. 1. Short title; table of contents.
Sec. 2. Findings.

TITLE I—RENEWABLE ENERGY

Sec. 101. National renewable energy standard.

TITLE II—ENERGY EFFICIENCY

Sec. 201. National energy efficiency standard.
SEC. 2. FINDINGS.

Congress finds as follows:

(1) The United States has the objective of stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent “dangerous anthropogenic interference” with the climate system as demonstrated by becoming a party to the 1992 United Nations Framework Convention on Climate Change, pledging to China to reduce greenhouse gas emissions to 28 percent of their 2005 levels by 2025, and regulating greenhouse gas emissions from stationary sources, mobile sources, and electrical power suppliers.

(2) To achieve this objective, the increase in global mean surface temperature should not exceed 2°C (3.6°F) above preindustrial temperature by 2100 consistent with the Paris Agreement that entered into force in 2016.

(3) The risks associated with a temperature increase above 2°C (3.6°F) are grave, including the disintegration of the Greenland ice sheet, which, if it were to melt completely, would raise global aver-
age sea level by approximately 23 feet, devastating
many of the world’s coastal areas and population
centers.

(4) A 2018 report by the Intergovernmental
Panel on Climate Change demonstrated that limiting
the temperature increase to 1.5°C will result in still
harmful, but significantly less severe outcomes than
a 2°C increase.

(5) The Intergovernmental Panel on Climate
Change projects that temperatures will rise 1.5°C
between 2030 and 2052. In order to limit the tem-
perature increase to 1.5°C, global net anthropogenic
carbon dioxide emissions must reach net zero by
2050.

(6) The 2018 National Climate Assessment, au-
thored by more than 300 experts and released by the
United States Global Change Research Program,
makes clear that the present unprecedented rises in
global temperature are primarily due to human ac-
tivities. The changing climate will devastate all sec-
tors of society and disproportionately harm the most
vulnerable communities.

(7) Serious global warming impacts have al-
ready been observed in the United States and world-
wide, including——
(A) increases in heat waves and other extreme weather events;
(B) rise in sea level, retreat of glaciers and polar ice;
(C) decline in mountain snowpack, increased drought (including droughts in the West and South United States) resulting in damage to our economy and property;
(D) extreme weather conditions resulting in wildfires, stronger hurricanes, and polar vortex occurrences resulting in further damage to property and our economy;
(E) damage to our environment such as ocean acidification, extensive coral bleaching, migrations, and shifts in the yearly cycles of plants and animals; and
(F) effects on human population, including population displacement and adverse health effects such as the spread of infectious diseases and climate-related conditions such as asthma.

(8) Scientists project that under a midrange estimate of global warming, by 2050, roughly one-third of animal and plant species will be committed to extinction.
(9) After remaining steady from 2014 to 2016, global carbon dioxide emissions increased 1.4 percent in 2017.

(10) Decisive action is needed to minimize the many dangers posed by global warming.

(11) The timing of such action is critical, given that greenhouse gases can persist in the atmosphere for more than a century.

(12) With less than 5 percent of the world population, the United States emits approximately 15 percent of the world’s total greenhouse gas emissions and must be a leader in addressing global warming.

(13) The State of California, the 5th largest economy in the world, has shown that renewable energy standards and greenhouse gas emissions regulation can reduce greenhouse gas emissions while fostering significant economic growth.

(14) Existing energy efficiency and clean, renewable energy technologies can reduce global warming pollution, while saving consumers money, reducing our dependence on oil, enhancing national security, cleaning the air, and protecting pristine places from drilling and mining.
TITLE I—RENEWABLE ENERGY

SEC. 101. NATIONAL RENEWABLE ENERGY STANDARD.

Title VI of the Public Utility Regulatory Policies Act of 1978 is amended by adding at the end the following:

“SEC. 610. NATIONAL RENEWABLE ENERGY STANDARD.

“(a) IN GENERAL.—The Secretary shall promulgate regulations requiring that—

“(1) beginning in calendar year 2022, the percentage of electric energy generated from renewable sources that is sold at the retail level in the United States shall increase each year; and

“(2) in calendar year 2035 and each subsequent calendar year, such percentage shall not be less than 100 percent of the total electric energy sold at the retail level in the United States.

“(b) CONSULTATION.—The Secretary shall carry out this section in consultation with the Administrator of the Environmental Protection Agency.

“(c) RULE OF CONSTRUCTION.—Nothing in this section shall be construed to preempt or limit State actions to enhance renewable energy generation or energy efficiency.”.
TITLE II—ENERGY EFFICIENCY

SEC. 201. NATIONAL ENERGY EFFICIENCY STANDARD.

(a) IN GENERAL.—Title VI of the Public Utility Regulatory Policies Act of 1978, as amended by section 101 of this Act, is further amended by adding at the end the following:

“SEC. 611. NATIONAL ENERGY EFFICIENCY STANDARD.

“(a) IN GENERAL.—The Secretary shall promulgate regulations in accordance with this section setting end-user—

“(1) electricity savings targets for retail electric energy suppliers; and

“(2) natural gas savings targets for retail natural gas suppliers.

“(b) CONSULTATION.—The Secretary shall carry out this section in consultation with the Administrator of the Environmental Protection Agency.

“(c) REQUIREMENTS.—With respect to targets under subsection (a):

“(1) The targets shall require each retail electric energy supplier to secure annual electricity savings, and each retail natural gas supplier to secure annual natural gas savings, of a set percentage of the quantity of electricity or natural gas sold in the most recent year to retail customers.
“(2) The electricity savings and natural gas savings shall be achieved through end-use efficiency improvements at customer facilities.

“(3) The targets are cumulative. Each year’s electricity savings or natural gas savings shall be achieved in addition to the previous years’ savings.

“(4) For each of calendar years 2022 through 2030, the targets are as follows:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Cumulative Electricity Savings Percentage</th>
<th>Cumulative Natural Gas Savings Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>0.375</td>
<td>0.25</td>
</tr>
<tr>
<td>2023</td>
<td>1.125</td>
<td>0.60</td>
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<tr>
<td>2024</td>
<td>2.25</td>
<td>1.05</td>
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<tr>
<td>2025</td>
<td>3.75</td>
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<tr>
<td>2026</td>
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<td>2.05</td>
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<tr>
<td>2027</td>
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<tr>
<td>2028</td>
<td>8.25</td>
<td>3.05</td>
</tr>
<tr>
<td>2029</td>
<td>9.75</td>
<td>3.55</td>
</tr>
<tr>
<td>2030</td>
<td>11.25</td>
<td>4.05</td>
</tr>
</tbody>
</table>

“(d) REQUIRED PERCENTAGES AFTER 2030.—The Secretary may, upon petition or upon the Secretary’s own initiative, increase the required percentage of end-user electricity savings or natural gas savings for years after 2030.

“(e) MARKET-BASED TRADING SYSTEM.—The Secretary shall allow suppliers to achieve the required percentage of end-user electricity savings or natural gas sav-
ings under this section through a market-based trading system.

“(f) Rule of Construction.—Nothing in this section shall be construed to preempt or limit State actions to enhance renewable energy generation or energy efficiency.”.

(b) Conforming Amendment.—The table of contents for the Public Utility Regulatory Policies Act of 1978 is amended by inserting after the item relating to section 608 the following:

“Sec. 609. Rural and remote communities electrification grants.
Sec. 610. National renewable energy standard.
Sec. 611. National energy efficiency standard.”.

**TITLE III—SCIENCE-BASED REDUCTIONS**

**SEC. 301. NET EMISSIONS REDUCTION TARGETS.**

Not later than 1 year after the date of enactment of this Act, the Administrator of the Environmental Protection Agency (in this title referred to as the “Administrator”) shall promulgate annual net emissions reduction targets for each of calendar years 2030 through 2050, so as to ensure that the quantity of United States net greenhouse gas emissions—

1. in 2035, is at least 52 percent below the quantity of such emissions in 2005; and
2. in 2050, is zero.
SEC. 302. NATIONAL ACADEMIES REVIEW.

Not later than 5 years after the date of the enactment of this Act, and every 5 years thereafter, the Administrator shall enter into an arrangement with the National Academies (or, if the National Academies decline to enter into such arrangement, another appropriate entity) under which the National Academies, acting through the National Academy of Sciences and the National Research Council, will submit a report to the Administrator and the Congress on the prospects for avoiding dangerous anthropogenic interference with the climate system and the progress made to date. Each such report shall—

(1) evaluate whether the net emissions reduction targets promulgated pursuant to section 301 and the other policies to reduce United States net greenhouse gas emissions under this Act, the amendments made by this Act, and other provisions of law, including the Clean Air Act (42 U.S.C. 7401 et seq.), are likely to be sufficient to avoid dangerous anthropogenic interference with the climate system, taking into account the actions of other nations; and

(2) if the National Academies concludes that such targets and policies are not likely to be sufficient to avoid dangerous anthropogenic interference with the climate system—
(A) identify the needed amount of further reductions in atmospheric greenhouse gas concentrations; and

(B) recommend additional United States and international actions to further reduce atmospheric greenhouse gas concentrations.

SEC. 303. REGULATIONS.

(a) In General.—The Administrator shall—

(1) not later than 7 years after the date of enactment of this Act, promulgate final regulations to implement the net emissions reduction targets under section 301; and

(2) not less than every 5 years thereafter—

(A) review such regulations, taking into account the reports under section 302; and

(B) revise such regulations as necessary to implement such net emissions reduction targets.

(b) Rulemaking on Recommendations of National Academies.—If any report under section 302 includes a recommendation under section 302(2)(B) for regulatory action by a Federal department or agency, and such regulatory action is within the authority of such department or agency (under law other than this subsection), the head of such department or agency shall, not
later than 2 years after the submission of such report, fi-
nalize a rulemaking—

(1) to carry out such regulatory action; or

(2) to explain the reasons for declining to act.

(c) ADDITIONAL REGULATIONS.—The regulations
promulgated under subsection (a) may include additional
requirements to reduce United States net greenhouse gas
emissions from any source or sector. Any such regulations
that address sources whose greenhouse gas emissions are
regulated pursuant to section 111(d) of the Clean Air Act
(42 U.S.C. 7411(d)) shall account for the compliance
schedule promulgated pursuant to such section 111(d).

Regulations under this section may include market-based
measures, emissions performance standards, efficiency
performance standards, best management practices, tech-
nology-based requirements, and other forms of require-
ments.

(d) RELATION TO OTHER AUTHORITY.—The author-
ity vested by this title is in addition to the authority to
regulate greenhouse gas emissions pursuant to other pro-
visions of law.

SEC. 304. SAVINGS CLAUSE.

Nothing in this title shall be interpreted to preempt
or limit State actions to address climate change.
SEC. 305. DEFINITIONS.

In this title:

(1) **GREENHOUSE GAS.**—The term “greenhouse gas” means—

(A) carbon dioxide;

(B) methane;

(C) nitrous oxide;

(D) hydrofluorocarbons;

(E) perfluorocarbons;

(F) sulfur hexafluoride; or

(G) any other anthropogenically emitted gas that is determined by the Administrator, after notice and comment, to contribute to global warming to a non-negligible degree.

(2) **UNITED STATES NET GREENHOUSE GAS EMISSIONS.**—The term “United States net greenhouse gas emissions” means net greenhouse gas emissions, as calculated by the Administrator on an annual basis and reported to the United Nations Framework Convention on Climate Change Secretariat.

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