

117TH CONGRESS  
1ST SESSION

# H. R. 4309

To advance innovation in and deployment of zero-emission electricity technology, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

JULY 1, 2021

Ms. DEGETTE (for herself, Mr. PETERS, and Ms. KUSTER) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Science, Space, and Technology, Ways and Means, Transportation and Infrastructure, and Education and Labor, 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 advance innovation in and deployment of zero-emission electricity technology, 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; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the  
5 “Clean Energy Innovation and Deployment Act of 2021”.

6 (b) TABLE OF CONTENTS.—The table of contents for  
7 this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—INVESTMENT IN CLEAN ENERGY TECHNOLOGY  
INNOVATION

Sec. 100. Purpose.

Subtitle A—Clean Energy Deployment Administration

- Sec. 101. Definitions.
- Sec. 102. Energy technology deployment goals.
- Sec. 103. Clean Energy Deployment Administration.
- Sec. 104. Administration functions.
- Sec. 105. Improvements to existing clean energy investment programs.
- Sec. 106. Federal credit authority.
- Sec. 107. General provisions.

Subtitle B—Carbon-Free Technology Innovation

- Sec. 111. Demand efficiency technology innovation.
- Sec. 112. Super hot rock geothermal energy technology innovation.
- Sec. 113. Zero carbon fuel technology innovation.
- Sec. 114. Advanced nuclear reactor innovation.
- Sec. 115. National offshore wind energy goal.

TITLE II—ZERO-EMISSION ELECTRICITY STANDARD

Sec. 200. Purpose.

Subtitle A—Zero-Emission Electricity Standard

- Sec. 201. Definitions.
- Sec. 202. Zero-emission electricity requirement.
- Sec. 203. Zero-emission electricity credit trading program.
- Sec. 204. Determination and issuance of quantity of zero-emission electricity credits.
- Sec. 205. Carbon Mitigation Fund.
- Sec. 206. State programs.
- Sec. 207. Report to Congress.
- Sec. 208. Information collection.
- Sec. 209. Civil penalties.
- Sec. 210. Regulations.

Subtitle B—Methane Regulation

Sec. 211. Methane regulation.

TITLE III—INCENTIVES FOR THE ACCELERATED DEPLOYMENT  
OF ZERO-EMISSION ELECTRICITY

Sec. 300. Purpose.

Subtitle A—Incentives for the Accelerated Deployment of 80-Percent and  
100-Percent Zero-Emission Electricity Systems

- Sec. 301. Zero-emission electricity acceleration investment tax credit.
- Sec. 302. Zero-emission electricity acceleration grants.
- Sec. 303. Recipients of certain clean energy investment tax credits.

Subtitle B—Carbon-Targeted Zero-Emission Electricity Tax Credit

- Sec. 311. Carbon-targeted zero-emission electricity tax credit.
- Sec. 312. Election to treat carbon-targeted zero-emission electricity facility as energy property.
- Sec. 313. Energy tax credit monetization.

TITLE IV—LOW-INCOME RATE-PAYER PROTECTION

- Sec. 400. Purpose.
- Sec. 401. Weatherization assistance program.
- Sec. 402. LIHEAP authorization.

TITLE V—ENERGY WORKFORCE TRANSITION AND TRAINING

- Sec. 500. Purposes and definitions.

Subtitle A—State Energy Plans

- Sec. 501. State energy plans.
- Sec. 502. Authorization of appropriations.

Subtitle B—Energy Workforce Transition

- Sec. 511. Energy Workforce Transition Office and Advisory Committee.
- Sec. 512. Energy workforce transition plans and reemployment of affected workers.

Subtitle C—Modern Energy Workforce Development

PART 1—MODERN ENERGY WORKFORCE DEVELOPMENT

- Sec. 521. Modern energy workforce development.
- Sec. 522. Clean Energy Jobs Training Program.
- Sec. 523. University Zero-Emission Energy Leadership Program.
- Sec. 524. Authorization of appropriations.

PART 2—CLIMATE RESILIENCY CORPS

- Sec. 531. Establishment of the Climate Resiliency Corps.
- Sec. 532. Board of Directors of the Climate Resiliency Corps.
- Sec. 533. Chief executive officer of the Climate Resiliency Corps.
- Sec. 534. Senior management.
- Sec. 535. General employment within the Climate Resiliency Corps.
- Sec. 536. Project applications.
- Sec. 537. Funding.

1 **TITLE I—INVESTMENT IN CLEAN**  
 2 **ENERGY TECHNOLOGY INNO-**  
 3 **VATION**

4 **SEC. 100. PURPOSE.**

5 The purpose of this title is to facilitate innovation in  
 6 a wide range of zero-emission electricity technologies.

1                   **Subtitle A—Clean Energy**  
2                   **Deployment Administration**

3 **SEC. 101. DEFINITIONS.**

4           In this subtitle:

5                   (1) **ADMINISTRATION.**—The term “Administra-  
6                   tion” means the Clean Energy Deployment Adminis-  
7                   tration established by section 103.

8                   (2) **ADMINISTRATOR.**—The term “Adminis-  
9                   trator” means the Administrator of the Administra-  
10                  tion.

11                  (3) **ADVISORY COUNCIL.**—The term “Advisory  
12                  Council” means the Energy Technology Advisory  
13                  Council of the Administration.

14                  (4) **BREAKTHROUGH TECHNOLOGY.**—The term  
15                  “breakthrough technology” means a clean energy  
16                  technology that—

17                               (A) presents a significant opportunity to  
18                               advance the goals developed by the Secretary  
19                               under section 102, as assessed under the meth-  
20                               odology established by the Advisory Council;  
21                               and

22                               (B) has not been determined by the Sec-  
23                               retary to be commercially ready.

24                  (5) **CLEAN ENERGY TECHNOLOGY.**—The term  
25                  “clean energy technology” means a technology re-

1       lated to the production, use, transmission, storage,  
2       control, or conservation of energy that will con-  
3       tribute to the stabilization of the climate by reducing  
4       greenhouse gas emissions or sequestering or utilizing  
5       carbon dioxide and—

6               (A) reduce the need for additional energy  
7               supplies by using existing energy supplies with  
8               greater efficiency;

9               (B) transmit, distribute, or transport en-  
10              ergy with greater effectiveness through the in-  
11              frastructure of the United States; or

12             (C) increase and diversify the sources of  
13             energy in the United States in a way that will  
14             reduce risk to human health, safety, and wel-  
15             fare and the environment and create energy se-  
16             curity.

17             (6) COST.—The term “cost” has the meaning  
18             given the term in section 502 of the Federal Credit  
19             Reform Act of 1990 (2 U.S.C. 661a).

20             (7) DIRECT LOAN.—The term “direct loan” has  
21             the meaning given the term in section 502 of the  
22             Federal Credit Reform Act of 1990 (2 U.S.C. 661a).

23             (8) ENERGY TRANSITION COMMUNITY.—The  
24             term “energy transition community” has the mean-  
25             ing given such term in section 500 of this Act.

1           (9) FINANCIAL INSTITUTION.—The term “fi-  
2           nancial institution” means—

3                   (A) an insured bank (as defined in section  
4                   3(h) of the Federal Deposit Insurance Act (12  
5                   U.S.C. 1813(h)));

6                   (B) a commercial bank or trust company;

7                   (C) a private banker;

8                   (D) an agency or branch of a foreign bank  
9                   in the United States;

10                  (E) any credit union;

11                  (F) a thrift institution;

12                  (G) a broker or dealer registered with the  
13                  Securities and Exchange Commission under the  
14                  Securities Exchange Act of 1934 (15 U.S.C.  
15                  78a et seq.);

16                  (H) a broker or dealer in securities or  
17                  commodities;

18                  (I) an investment banker or investment  
19                  company;

20                  (J) an insurance company;

21                  (K) a loan or finance company; and

22                  (L) a green bank.

23           (10) FUND.—The term “Fund” means the  
24           Clean Energy Investment Fund established by sec-  
25           tion 105(a).

1           (11) GREEN BANK.—The term “green bank”  
2 means a dedicated public or nonprofit specialized fi-  
3 nance entity that—

4           (A) is designed to strategically drive pri-  
5 vate capital into emerging low- and zero-emis-  
6 sion goods and services;

7           (B) uses finance tools to mitigate climate  
8 change;

9           (C) does not take deposits;

10          (D) is funded by government, public, pri-  
11 vate, or charitable contributions; and

12          (E) invests alone or in conjunction with  
13 other investors.

14          (12) LOAN GUARANTEE.—The term “loan guar-  
15 antee” has the meaning given the term in section  
16 502 of the Federal Credit Reform Act of 1990 (2  
17 U.S.C. 661a).

18          (13) NATIONAL LABORATORY.—The term “Na-  
19 tional Laboratory” has the meaning given the term  
20 in section 2 of the Energy Policy Act of 2005 (42  
21 U.S.C. 15801).

22          (14) SECRETARY.—The term “Secretary”  
23 means the Secretary of Energy.

1           (15) SECURITY.—The term “security” has the  
2           meaning given the term in section 2 of the Securities  
3           Act of 1933 (15 U.S.C. 77b).

4           (16) SMALL BUSINESS.—The term “small busi-  
5           ness” means a business which is independently  
6           owned and operated and which is not dominant in  
7           its field of operation. The term “small business”  
8           may be further defined by the Administrator by the  
9           number of employees, dollar volume of business, net  
10          worth, net income, or other factors.

11          (17) STATE.—The term “State” means—

12                   (A) a State;

13                   (B) the District of Columbia;

14                   (C) the Commonwealth of Puerto Rico;

15                   and

16                   (D) any other territory or possession of the  
17          United States.

18 **SEC. 102. ENERGY TECHNOLOGY DEPLOYMENT GOALS.**

19          (a) GOALS.—Not later than 1 year after the date of  
20          enactment of this Act, the Secretary, in consultation with  
21          the Advisory Council, shall develop and publish for review  
22          and comment in the Federal Register near-, medium-, and  
23          long-term goals (including numerical performance targets  
24          at appropriate intervals to measure progress toward those  
25          goals) for the deployment of clean energy technologies



1 through the credit support programs established by this  
2 subtitle to promote—

3           (1) the deployment, by not later than 2050, of  
4           electric generating capacity with net-zero greenhouse  
5           gas emissions, that is sufficient to reliably meet the  
6           projected energy demand of the United States in  
7           2050;

8           (2) clean energy technologies in vehicles and  
9           fuels that will substantially reduce the reliance of  
10          the United States on foreign sources of energy and  
11          insulate consumers from the volatility of global en-  
12          ergy markets;

13          (3) a domestic commercialization and manufac-  
14          turing capacity that will establish the United States  
15          as a world leader in clean energy technologies across  
16          multiple sectors;

17          (4) the installation of electricity transmission  
18          infrastructure with the capacity to provide the cost-  
19          effective deployment of zero-emission electricity tech-  
20          nologies appropriate to each region of the United  
21          States;

22          (5) the transformation of the building stock of  
23          the United States to net zero energy consumption;

24          (6) the recovery, use, and prevention of waste  
25          energy;

1           (7) domestic manufacturing of clean energy  
2 technologies on a scale that is sufficient to achieve  
3 price parity with conventional energy sources;

4           (8) domestic production of commodities and  
5 materials, including steel, chemicals, polymers, and  
6 cement, through the use of clean energy technologies  
7 that will establish the United States as a world leader  
8 in the environmentally sustainable production of  
9 such commodities and materials;

10          (9) a robust, efficient, and interactive electricity  
11 transmission grid that will allow for the incorpora-  
12 tion of clean energy technologies, distributed genera-  
13 tion, smart grid functions, and demand-response in  
14 each regional electric grid;

15          (10) a variety of financial products intended to  
16 allow owners and users of residential, retail, com-  
17 mercial, and industrial buildings to make energy ef-  
18 ficiency and distributed generation technology in-  
19 vestments with reasonable payback periods;

20          (11) technical assistance to States and other  
21 political subdivisions that do not have green banks  
22 to establish independent, nonprofit green banks in  
23 such States and political subdivisions, including by  
24 working with relevant stakeholders in such States  
25 and political subdivisions;

1           (12) loan guarantees, credit enhancements, and  
2 other financial products to extend the reach and ef-  
3 fectiveness of local, State, and regional financing en-  
4 tities, including green banks, and particularly to  
5 support their ability to finance local projects that—

6                   (A) provide jobs;

7                   (B) mitigate greenhouse gas emissions;

8           and

9                   (C) serve—

10                   (i) low-income, minority, and dis-  
11 tressed neighborhoods (within the meaning  
12 of section 910 of the Housing and Commu-  
13 nity Development Act of 1992 (12 U.S.C.  
14 2901 note; Public Law 102–550)); or

15                   (ii) low-income, minority, and rural  
16 consumers (within the meaning of the final  
17 rule of the Bureau of Consumer Financial  
18 Protection entitled “Ability-to-Repay and  
19 Qualified Mortgage Standards Under the  
20 Truth in Lending Act (Regulation Z)” (78  
21 Fed. Reg. 6408 (January 30, 2013))); and

22           (13) such other goals as the Secretary, in con-  
23 sultation with the Advisory Council, determines to be  
24 consistent with this subtitle.

1 (b) REVISIONS.—The Secretary shall revise the goals  
2 established under subsection (a), from time to time as ap-  
3 propriate, to account for advances in technology and infra-  
4 structure.

5 **SEC. 103. CLEAN ENERGY DEPLOYMENT ADMINISTRATION.**

6 (a) ESTABLISHMENT.—

7 (1) IN GENERAL.—There is established in the  
8 Department of Energy an administration, to be  
9 known as the Clean Energy Deployment Administra-  
10 tion. There shall be at the head of the Administra-  
11 tion an Administrator and a Board of Directors,  
12 who shall be appointed by the President with the ad-  
13 vice and consent of the Senate.

14 (2) STATUS.—

15 (A) IN GENERAL.—The Administration  
16 (including officers, employees, and agents of the  
17 Administration) shall not be responsible to, or  
18 subject to the authority, direction, or control of,  
19 any other officer, employee, or agent of the De-  
20 partment of Energy other than the Secretary,  
21 acting through the Administrator.

22 (B) EXEMPTION FROM REORGANIZA-  
23 TION.—The Administration shall be exempt  
24 from the reorganization authority provided

1 under section 643 of the Department of Energy  
2 Organization Act (42 U.S.C. 7253).

3 (C) INSPECTOR GENERAL.—Section 12 of  
4 the Inspector General Act of 1978 (5 U.S.C.  
5 App.) is amended—

6 (i) in paragraph (1), by inserting “the  
7 Administrator of the Clean Energy Deploy-  
8 ment Administration;” after “Export-Im-  
9 port Bank;” and

10 (ii) in paragraph (2), by inserting  
11 “the Clean Energy Deployment Adminis-  
12 tration,” after “Export-Import Bank,”.

13 (3) OFFICES.—

14 (A) PRINCIPAL OFFICE.—The Administra-  
15 tion shall—

16 (i) maintain the principal office of the  
17 Administration in the District of Columbia;  
18 and

19 (ii) for purposes of venue in civil ac-  
20 tions, be considered to be a resident of the  
21 District of Columbia.

22 (B) OTHER OFFICES.—The Administration  
23 may establish other offices in such other places  
24 as the Administration considers necessary or

1           appropriate for the conduct of the business of  
2           the Administration.

3           (b) ADMINISTRATOR.—

4           (1) IN GENERAL.—The Administrator shall  
5           be—

6           (A) appointed by the President, with the  
7           advice and consent of the Senate, for a 5-year  
8           term; and

9           (B) compensated at the annual rate of  
10          basic pay prescribed for level II of the Execu-  
11          tive Schedule under section 5313 of title 5,  
12          United States Code.

13          (2) DUTIES.—The Administrator shall—

14          (A) serve as—

15                  (i) the Chief Executive Officer of the  
16                  Administration; and

17                  (ii) the Chairman of the Board of Di-  
18                  rectors;

19          (B) consult with the Secretary of Agri-  
20          culture, the Secretary of the Interior, the Ad-  
21          ministrator of the Environmental Protection  
22          Agency, and the heads of other agencies as ap-  
23          propriate, in carrying out the duties described  
24          in this paragraph;

25          (C) ensure that—

1 (i) the Administration operates in a  
2 safe and sound manner, including mainte-  
3 nance of adequate capital and internal con-  
4 trols (consistent with section 404 of the  
5 Sarbanes-Oxley Act of 2002 (15 U.S.C.  
6 7262));

7 (ii) the operations and activities of the  
8 Administration foster liquid, efficient, com-  
9 petitive, and resilient energy and energy ef-  
10 ficiency finance markets;

11 (iii) the Administration carries out  
12 this subtitle only through activities that  
13 are authorized under and consistent with  
14 this subtitle; and

15 (iv) the activities of the Administra-  
16 tion and the manner in which the Adminis-  
17 tration is operated are consistent with the  
18 public interest;

19 (D) develop policies and procedures for the  
20 Administration that will—

21 (i) promote a self-sustaining portfolio  
22 of investments that will maximize the value  
23 of investments to effectively promote clean  
24 energy technologies;

1 (ii) promote transparency and open-  
2 ness in Administration operations;

3 (iii) afford the Administration with  
4 sufficient flexibility to carry out this sub-  
5 title;

6 (iv) provide for the efficient proc-  
7 essing of applications;

8 (v) promote the participation of pri-  
9 vate and public financial institutions and  
10 other sources of private capital in invest-  
11 ments, on commercially reasonable terms,  
12 if and to the extent the capital is available;  
13 and

14 (vi) promote the availability of finan-  
15 cial products to small business by working  
16 with entities, including green banks, that  
17 have appropriate expertise in extending  
18 credit or other relevant financial services  
19 to small businesses that are developing  
20 clean energy technologies;

21 (E) ensure, to the maximum extent prac-  
22 ticable and to the extent of available resources,  
23 that on the request of any energy transition  
24 community or Indian Tribe, such energy transi-  
25 tion community or Indian Tribe shall have



1 available scientific and technical information  
2 and expertise for use in the regulation, develop-  
3 ment, and management of clean energy tech-  
4 nologies, either—

5 (i) directly, acting through Federal of-  
6 ficials within the Administration; or

7 (ii) indirectly, by providing financial  
8 assistance to an energy transition commu-  
9 nity or an Indian Tribe to secure inde-  
10 pendent assistance in the regulation, devel-  
11 opment, and management of clean energy  
12 technologies; and

13 (F) with the concurrence of the Board of  
14 Directors, establish expected loss reserves for  
15 the support provided by the Administration con-  
16 sistent with section 104(a).

17 (c) BOARD OF DIRECTORS.—

18 (1) IN GENERAL.—The Board of Directors of  
19 the Administration shall consist of—

20 (A) the Secretary or the designee of the  
21 Secretary, who shall serve as an ex officio vot-  
22 ing member of the Board of Directors;

23 (B) the Administrator, who shall serve as  
24 the Chairman of the Board of Directors; and

25 (C) 7 additional members who shall—

1 (i) be appointed by the President,  
2 with the advice and consent of the Senate,  
3 for staggered 5-year terms; and

4 (ii) have experience in banking or fi-  
5 nancial services relevant to the operations  
6 of the Administration, including individuals  
7 with substantial experience in the develop-  
8 ment of energy projects, the electricity  
9 generation sector, the transportation sec-  
10 tor, the manufacturing sector, the energy  
11 efficiency sector, or helping low-income,  
12 minority, and distressed neighborhoods  
13 (within the meaning of section 910 of the  
14 Housing and Community Development Act  
15 of 1992 (12 U.S.C. 2901 note; Public Law  
16 102–550)) develop and benefit from clean  
17 energy technologies.

18 (2) DUTIES.—The Board of Directors shall—

19 (A) oversee the operations of the Adminis-  
20 tration and ensure industry best practices are  
21 followed in all financial transactions involving  
22 the Administration;

23 (B) consult with the Administrator on the  
24 general policies and procedures of the Adminis-

1           tration to ensure that the interests of the tax-  
2           payers are protected;

3           (C) ensure that the portfolio of invest-  
4           ments of the Administration are consistent with  
5           this subtitle and with the long-term financial  
6           stability of the Administration;

7           (D) ensure that the operations and activi-  
8           ties of the Administration are consistent with  
9           the development of a robust private sector that  
10          can provide commercial loans or financing prod-  
11          ucts for clean energy technologies; and

12          (E) not serve on a full-time basis, except  
13          that the Board of Directors shall meet at least  
14          quarterly to review, as appropriate, applications  
15          for credit support and set policies and proce-  
16          dures as necessary.

17          (3) REMOVAL.—An appointed member of the  
18          Board of Directors may be removed from office by  
19          the President for good cause.

20          (4) VACANCIES.—An appointed seat on the  
21          Board of Directors that becomes vacant shall be  
22          filled by appointment by the President, but only for  
23          the unexpired portion of the term of the vacating  
24          member.

1           (5) COMPENSATION OF MEMBERS.—An ap-  
2           pointed member of the Board of Directors shall be  
3           compensated at a rate equal to the daily equivalent  
4           of the annual rate of basic pay prescribed for level  
5           III of the Executive Schedule under section 5314 of  
6           title 5, United States Code, for each day (including  
7           travel time) during which the member is engaged in  
8           the performance of the duties of the Board of Direc-  
9           tors.

10          (d) ENERGY TECHNOLOGY ADVISORY COUNCIL.—

11           (1) IN GENERAL.—The Administration shall  
12           have an Energy Technology Advisory Council con-  
13           sisting of—

14                   (A) 6 members selected by the Secretary;

15                   and

16                   (B) 3 members selected by the Board of  
17           Directors of the Administration.

18           (2) QUALIFICATIONS.—The members of the Ad-  
19           visory Council shall—

20                   (A) have relevant scientific expertise; and

21                   (B) in the case of the members selected by  
22           the Secretary under paragraph (1)(A), include  
23           representatives of—

24                           (i) the academic community;

25                           (ii) the private research community;

- 1 (iii) National Laboratories;
- 2 (iv) the technology or project develop-
- 3 ment community;
- 4 (v) the commercial energy financing
- 5 and operations sector; and
- 6 (vi) the electric generation sector, in-
- 7 cluding at least one person who is knowl-
- 8 edgeable of the electric cooperative sector.

9 (3) DUTIES.—

10 (A) ADVICE.—The Advisory Council shall

11 provide advice to the Administration regarding

12 the technological approaches that should be

13 supported by the Administration to meet the

14 goals developed by the Secretary under section

15 102.

16 (B) METHODOLOGY FOR ASSESSMENT.—

17 The Advisory Council shall develop and publish

18 for comment in the Federal Register a method-

19 ology for the assessment of clean energy tech-

20 nologies. Such methodology shall—

- 21 (i) allow the Administration to evalu-
- 22 ate projects based on the progress likely to
- 23 be achieved per-dollar invested in clean en-
- 24 ergy technology; and

1           (ii) take into account the extent to  
2           which support for a clean energy tech-  
3           nology is likely to accrue benefits that are  
4           attributable to commercial-scale deploy-  
5           ment taking place earlier than that which  
6           otherwise would have occurred without the  
7           support.

8           (4) TERM.—

9           (A) IN GENERAL.—Members of the Advi-  
10          sory Council shall have 5-year staggered terms,  
11          as determined by the Secretary and the Admin-  
12          istrator.

13          (B) REAPPOINTMENT.—A member of the  
14          Advisory Council may be reappointed.

15          (5) COMPENSATION.—A member of the Advi-  
16          sory Council, who is not otherwise compensated as  
17          a Federal employee, shall be compensated at a rate  
18          equal to the daily equivalent of the annual rate of  
19          basic pay prescribed for level IV of the Executive  
20          Schedule under section 5315 of title 5, United  
21          States Code, for each day (including travel time)  
22          during which the member is engaged in the perform-  
23          ance of the duties of the Advisory Council.

24          (e) STAFF.—

1           (1) IN GENERAL.—The Administrator, in con-  
2           sultation with the Board of Directors, may—

3                   (A) appoint and terminate such officers,  
4                   attorneys, employees, and agents as are nec-  
5                   essary to carry out this subtitle; and

6                   (B) vest those personnel with such powers  
7                   and duties as the Administrator determines to  
8                   be necessary.

9           (2) DIRECT HIRE AUTHORITY.—

10                   (A) IN GENERAL.—Notwithstanding sec-  
11                   tion 3304 and sections 3309 through 3318 of  
12                   title 5, United States Code, the Administrator  
13                   may, on a determination that there is a severe  
14                   shortage of candidates or a critical hiring need  
15                   for particular positions, recruit and directly ap-  
16                   point highly qualified critical personnel with  
17                   specialized knowledge important to the function  
18                   of the Administration into the competitive serv-  
19                   ice.

20                   (B) EXCEPTION.—The authority granted  
21                   under subparagraph (A) shall not apply to posi-  
22                   tions in the excepted service or the Senior Exec-  
23                   utive Service.

24                   (C) REQUIREMENTS.—In exercising the  
25                   authority granted under subparagraph (A), the

1 Administrator shall ensure that any action  
2 taken by the Administrator—

3 (i) is consistent with the merit prin-  
4 ciples of section 2301 of title 5, United  
5 States Code; and

6 (ii) complies with the public notice re-  
7 quirements of section 3327 of title 5,  
8 United States Code.

9 (D) TERMINATION OF EFFECTIVENESS.—

10 The authority provided by this paragraph ter-  
11 minates effective on the date that is 3 years  
12 after the date of enactment of this Act.

13 (3) CRITICAL PAY AUTHORITY.—

14 (A) IN GENERAL.—Notwithstanding sec-  
15 tion 5377 of title 5, United States Code, and  
16 without regard to the provisions of that title  
17 governing appointments in the competitive serv-  
18 ice or the Senior Executive Service and chap-  
19 ters 51 and 53 of that title (relating to classi-  
20 fication and pay rates), the Administrator may  
21 establish, fix the compensation of, and appoint  
22 individuals to critical positions needed to carry  
23 out the functions of the Administration, if the  
24 Administrator certifies that—



1 (i) the positions require expertise of  
2 an extremely high level in a financial, tech-  
3 nical, or scientific field;

4 (ii) the Administration would not suc-  
5 cessfully accomplish an important mission  
6 without such an individual; and

7 (iii) exercise of the authority is nec-  
8 essary to recruit an individual who is ex-  
9 ceptionally well qualified for the position.

10 (B) LIMITATIONS.—The authority granted  
11 under subparagraph (A) shall be subject to the  
12 following conditions:

13 (i) The number of critical positions  
14 authorized by subparagraph (A) may not  
15 exceed 20 at any given time in the Admin-  
16 istration.

17 (ii) The term of an appointment  
18 under subparagraph (A) may not exceed 4  
19 years.

20 (iii) An individual appointed under  
21 subparagraph (A) may not have been an  
22 Administration employee at any time dur-  
23 ing the 2-year period preceding the date of  
24 appointment.

1 (iv) Total annual compensation for  
2 any individual appointed under subpara-  
3 graph (A) may not exceed the highest total  
4 annual compensation payable at the rate  
5 determined under section 104 of title 3,  
6 United States Code.

7 (v) An individual appointed under  
8 subparagraph (A) may not be considered  
9 to be an employee for purposes of sub-  
10 chapter II of chapter 75 of title 5, United  
11 States Code.

12 (C) NOTIFICATION.—Each year, the Ad-  
13 ministrator shall submit to Congress a notifica-  
14 tion that lists each individual appointed under  
15 this paragraph.

16 **SEC. 104. ADMINISTRATION FUNCTIONS.**

17 (a) DIRECT SUPPORT.—

18 (1) IN GENERAL.—The Administration may  
19 issue direct loans, letters of credit, loan guarantees,  
20 insurance products, or such other credit support (in-  
21 cluding through participation as a co-lender or a  
22 lending member of a syndication) as the Adminis-  
23 trator considers appropriate to deploy clean energy  
24 technologies if the Administrator has determined

1 that deployment of the technologies would benefit or  
2 be accelerated by the support.

3 (2) ELIGIBILITY CRITERIA.—In carrying out  
4 this subsection and awarding credit support to  
5 projects, the Administrator shall account for—

6 (A) how the technology rates based on an  
7 evaluation methodology established by the Advi-  
8 sory Council;

9 (B) how the project fits with the goals de-  
10 veloped by the Secretary under section 102; and

11 (C) the potential for the applicant to suc-  
12 cessfully complete the project.

13 (3) RISK.—

14 (A) TECHNOLOGY RISK.—In this para-  
15 graph, the term “technology risk”—

16 (i) means risk during construction or  
17 operation associated with the design, devel-  
18 opment, or deployment of a clean energy  
19 technology from the perspective of com-  
20 mercial lenders, that may be increased as  
21 a result of the absence of adequate histor-  
22 ical construction, operating, or perform-  
23 ance data from commercial applications of  
24 the technology; and

1                   (ii) includes risk associated with the  
2                   cost, schedule, performance, reliability,  
3                   maintenance, and the perception of risk.

4                   (B) EXPECTED LOAN LOSS RESERVE.—  
5                   The Administrator shall establish an expected  
6                   loan loss reserve to account for estimated losses  
7                   attributable to activities under this section that  
8                   is consistent with the purposes of—

9                   (i) developing breakthrough tech-  
10                   nologies to the point at which the associ-  
11                   ated technology risk is largely mitigated;

12                   (ii) achieving widespread deployment  
13                   and advancing the commercial viability of  
14                   clean energy technologies; and

15                   (iii) advancing the goals developed by  
16                   the Secretary under section 102.

17                   (C) INITIAL EXPECTED LOAN LOSS RE-  
18                   SERVE.—Until such time as the Administrator  
19                   determines sufficient data exist to establish an  
20                   expected loan loss reserve that is appropriate,  
21                   the Administrator shall consider establishing an  
22                   initial rate of 10 percent for the portfolio of in-  
23                   vestments under this subtitle.

24                   (D) PORTFOLIO INVESTMENT AP-  
25                   PROACH.—The Administration shall—

1 (i) use a portfolio investment ap-  
2 proach to mitigate risk and diversify in-  
3 vestments across technologies;

4 (ii) to the maximum extent practicable  
5 and consistent with long-term self-suffi-  
6 ciency, weigh the portfolio of investments  
7 in projects to advance goals developed by  
8 the Secretary under section 102; and

9 (iii) consistent with the expected loan  
10 loss reserve established under this para-  
11 graph, provide the maximum practicable  
12 percentage of support to promote break-  
13 through technologies.

14 (E) LOSS RATE REVIEW.—

15 (i) IN GENERAL.—The Board of Di-  
16 rectors shall review on an annual basis the  
17 loss rates of the portfolio to determine the  
18 adequacy of the reserves.

19 (ii) REPORT.—Not later than 90 days  
20 after the date of the initiation of each re-  
21 view under clause (i), the Administrator  
22 shall submit to the Committee on Energy  
23 and Commerce of the House of Represent-  
24 atives and the Committee on Energy and  
25 Natural Resources of the Senate a report

1           describing the results of the review and  
2           any recommended policy changes.

3           (4) APPLICATION REVIEW.—

4           (A) IN GENERAL.—To the maximum ex-  
5           tent practicable and consistent with sound busi-  
6           ness practices, the Administration shall seek to  
7           consolidate reviews of applications for credit  
8           support under this subtitle such that final deci-  
9           sions on applications can be issued not later  
10          than 180 days after the date of submission of  
11          a completed application.

12          (B) ENVIRONMENTAL REVIEW.—In car-  
13          rying out this subtitle, the Administration shall,  
14          to the maximum extent practicable—

15                  (i) avoid duplicating efforts that have  
16                  already been undertaken by other agencies,  
17                  including State agencies acting under Fed-  
18                  eral programs; and

19                  (ii) with the advice of the Council on  
20                  Environmental Quality and any other ap-  
21                  plicable agencies, use the administrative  
22                  records of similar reviews conducted  
23                  throughout the executive branch to develop  
24                  the most expeditious review process prac-  
25                  ticable.

1           (5) WAGE RATE REQUIREMENTS.—With respect  
2 to the labor standards specified in this section, the  
3 Secretary of Labor shall have the authority and  
4 functions set forth in Reorganization Plan Num-  
5 bered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.)  
6 and section 3145 of title 40, United States Code.

7           (b) INDIRECT SUPPORT.—

8           (1) IN GENERAL.—The Administration shall de-  
9 velop financial products and arrangements to pro-  
10 mote widespread deployment of, and private sector  
11 support of, clean energy technologies by facilitating  
12 aggregation of small projects and by providing indi-  
13 rect credit support, including credit enhancement, to  
14 private and public entities, including green banks.

15           (2) FINANCIAL PRODUCTS.—The Administra-  
16 tion—

17           (A) in cooperation with Federal, State,  
18 local, and private sector entities, shall develop  
19 debt instruments that directly aggregate, or  
20 provide for the aggregation of, projects for the  
21 deployment of clean energy technology on a  
22 scale appropriate for residential or commercial  
23 applications; and

24           (B) may insure, purchase, and make com-  
25 mitments to purchase, any debt instrument as-

1           sociated with the deployment of a clean energy  
2           technology (including instruments secured by  
3           liens or other collateral related to the funding  
4           of clean energy technology) for the purposes of  
5           enhancing the availability of private financing  
6           for deployment of clean energy technology.

7           (3) DISPOSITION OF DEBT OR INTEREST.—The  
8           Administration may acquire, hold, and sell or other-  
9           wise dispose of, pursuant to commitments or other-  
10          wise, any debt associated with the deployment of  
11          clean energy technologies or interest in the debt.

12          (4) PRICING.—

13                 (A) IN GENERAL.—The Administrator may  
14                 establish requirements, and impose charges or  
15                 fees, which may be regarded as elements of  
16                 pricing, for different classes of sellers, servicers,  
17                 or services.

18                 (B) CLASSIFICATION OF SELLERS AND  
19                 SERVICERS.—For the purpose of subparagraph  
20                 (A), the Administrator may classify sellers and  
21                 servicers as necessary to promote transparency  
22                 and liquidity and to properly characterize the  
23                 risk of default.

24          (5) ELIGIBILITY.—The Administrator shall es-  
25          tablish—



1 (A) eligibility criteria for loan originators,  
2 sellers, and servicers seeking support for port-  
3 folios of financial obligations relating to clean  
4 energy technologies to ensure the capability of  
5 the loan originators, sellers, and servicers to  
6 perform the functions required to maintain the  
7 expected performance of the portfolios; and

8 (B) such criteria, standards, guidelines,  
9 and mechanisms such that, to the maximum ex-  
10 tent practicable, loan originators and sellers will  
11 be able to determine the eligibility of loans for  
12 resale at the time of initial lending.

13 (6) SECONDARY MARKET SUPPORT.—

14 (A) IN GENERAL.—The Administration  
15 may lend on the security of, and make commit-  
16 ments to lend on the security of, any debt that  
17 the Administration has issued or is authorized  
18 to purchase under this section.

19 (B) AUTHORIZED ACTIONS.—On such  
20 terms and conditions as the Administrator may  
21 prescribe, the Administration may, based on the  
22 debt and with the concurrence of the Board of  
23 Directors—

24 (i) give security or guarantee;

25 (ii) pay interest or other return; and

1 (iii) issue notes, debentures, bonds, or  
2 other obligations or securities.

3 (7) LENDING ACTIVITIES.—

4 (A) IN GENERAL.—The Administrator  
5 shall determine—

6 (i) the volume of the lending activities  
7 of the Administration; and

8 (ii) the types of loan ratios, risk pro-  
9 files, interest rates, maturities, and  
10 charges or fees in the secondary market  
11 operations of the Administration.

12 (B) OBJECTIVES.—Determinations under  
13 subparagraph (A) shall be consistent with the  
14 objectives of—

15 (i) providing an attractive investment  
16 environment for clean energy technologies;

17 (ii) making the operations of the Ad-  
18 ministration self-supporting over the long  
19 term; and

20 (iii) advancing the goals developed by  
21 the Secretary under section 102.

22 **SEC. 105. IMPROVEMENTS TO EXISTING CLEAN ENERGY IN-**  
23 **VESTMENT PROGRAMS.**

24 (a) CLEAN ENERGY INVESTMENT FUND.—

1           (1) ESTABLISHMENT.—There is established in  
2 the Treasury of the United States a revolving fund,  
3 to be known as the Clean Energy Investment Fund,  
4 consisting of—

5           (A) such amounts as are deposited in the  
6 Fund under this subtitle and amendments made  
7 by this subtitle; and

8           (B) such sums as may be appropriated to  
9 the Fund.

10          (2) EXPENDITURES FROM FUND.—

11           (A) IN GENERAL.—Amounts in the Fund  
12 shall be available to the Secretary for obligation  
13 without fiscal year limitation, to remain avail-  
14 able until expended.

15           (B) ADMINISTRATIVE EXPENSES.—

16           (i) FEES.—Fees collected by the Sec-  
17 retary of the Treasury for expenses related  
18 to the administrative needs of the Fund  
19 shall be available without limitation to  
20 cover applicable expenses.

21           (ii) FUND.—To the extent that ad-  
22 ministrative expenses are not reimbursed  
23 through fees, an amount not to exceed 1.5  
24 percent of the amounts in the Fund as of  
25 the beginning of each fiscal year shall be

1 available to pay the administrative ex-  
2 penses for the fiscal year necessary to  
3 carry out title XVII of the Energy Policy  
4 Act of 2005 (42 U.S.C. 16511 et seq.).

5 (3) TRANSFERS OF AMOUNTS.—

6 (A) IN GENERAL.—The amounts required  
7 to be transferred to the Fund under this sub-  
8 section shall be transferred at least monthly  
9 from the general fund of the Treasury to the  
10 Fund on the basis of estimates made by the  
11 Secretary of the Treasury.

12 (B) CASH FLOWS.—Cash flows associated  
13 with costs of the Fund described in section  
14 502(5)(B) of the Federal Credit Reform Act of  
15 1990 (2 U.S.C. 661a(5)(B)) shall be trans-  
16 ferred to appropriate credit accounts.

17 (C) ADJUSTMENTS.—Proper adjustment  
18 shall be made in amounts subsequently trans-  
19 ferred to the extent prior estimates were in ex-  
20 cess of or less than the amounts required to be  
21 transferred.

22 (b) REVISIONS TO LOAN GUARANTEE PROGRAM AU-  
23 THORITY.—

24 (1) DEFINITION OF COMMERCIAL TECH-  
25 NOLOGY.—Section 1701(1) of the Energy Policy Act

1 of 2005 (42 U.S.C. 16511(1)) is amended by strik-  
2 ing subparagraph (B) and inserting the following:

3 “(B) EXCLUSION.—The term ‘commercial  
4 technology’ does not include a technology solely  
5 by the use of the technology in—

6 “(i) a demonstration project funded  
7 by the Department; or

8 “(ii) a project for which the Secretary  
9 approved a guarantee.”.

10 (2) SUBROGATION.—Section 1702(g)(2) of the  
11 Energy Policy Act of 2005 (42 U.S.C. 16512(g)(2))  
12 is amended by striking subparagraphs (B) and (C)  
13 and inserting the following:

14 “(B) SUPERIORITY OF RIGHTS.—Except as  
15 provided in subparagraph (C), the rights of the  
16 Secretary, with respect to any property ac-  
17 quired pursuant to a guarantee or related  
18 agreements, shall be superior to the rights of  
19 any other person with respect to the property.

20 “(C) TERMS AND CONDITIONS.—A guar-  
21 antee agreement shall include such detailed  
22 terms and conditions as the Secretary deter-  
23 mines appropriate to—

24 “(i) protect the interests of the United  
25 States in the case of default;

1           “(ii) have available all the patents and  
2           technology necessary for any person se-  
3           lected, including the Secretary, to complete  
4           and operate the project;

5           “(iii) provide for sharing the proceeds  
6           received from the sale of project assets  
7           with other creditors or control the disposi-  
8           tion of project assets if necessary to pro-  
9           tect the interests of the United States in  
10          the case of default; and

11          “(iv) provide such lien priority in  
12          project assets as necessary to protect the  
13          interests of the United States in the case  
14          of a default.”.

15 **SEC. 106. FEDERAL CREDIT AUTHORITY.**

16       (a) TRANSFER OF FUNCTIONS AND AUTHORITY.—

17           (1) IN GENERAL.—

18               (A) DEADLINE.—Subject to paragraph (2),  
19           on a finding by the Secretary and the Adminis-  
20           trator that the Administration is sufficiently  
21           ready to assume the functions, and that appli-  
22           cants to those programs will not be unduly ad-  
23           versely affected, but in no case later than 18  
24           months after the date of enactment of this Act,  
25           the functions and authority of the Secretary de-

1           scribed in subparagraph (B) shall be trans-  
2           ferred to the Administration.

3           (B) FUNCTIONS AND AUTHORITY.—The  
4           functions and authority of the Secretary de-  
5           scribed in this subparagraph are functions and  
6           authority under—

7                   (i) title XVII of the Energy Policy Act  
8                   of 2005 (42 U.S.C. 16511 et seq.);

9                   (ii) section 2602(c) of the Energy Pol-  
10                  icy Act of 1992 (25 U.S.C. 3502(c)); and

11                  (iii) financial services and program  
12                  management for grant, loan, and other  
13                  credit enhancement programs authorized  
14                  to be administered by the Secretary under  
15                  any other provision of law, as the Sec-  
16                  retary determines appropriate.

17           (2) FAILURE TO TRANSFER FUNCTIONS.—If the  
18           functions and authorities are not transferred to the  
19           Administration in accordance with paragraph (1),  
20           the Secretary and the Administrator shall submit to  
21           Congress a report on the reasons for delay and an  
22           expected timetable for transfer of the functions and  
23           authorities to the Administration not later than 2  
24           years after the enactment of this title and every year

1 thereafter until the functions and authorities are  
2 transferred to the Administration.

3 (3) EFFECT ON EXISTING RIGHTS AND OBLIGA-  
4 TIONS.—The transfer of functions and authority  
5 under this subsection shall not affect the rights and  
6 obligations of any party that arise under a prede-  
7 cessor program or authority prior to the transfer  
8 under this subsection.

9 (4) TRANSFER OF FUND AUTHORITY.—

10 (A) IN GENERAL.—On transfer of func-  
11 tions pursuant to paragraph (1), the Adminis-  
12 tration shall have all authorities to make use of  
13 the Fund reserved for the Secretary before the  
14 transfer.

15 (B) ADMINISTRATIVE EXPENSES.—Effec-  
16 tive beginning on the date of enactment of this  
17 Act, the Administrator may make use of up to  
18 1.5 percent of the amounts in the Fund as of  
19 the beginning of each fiscal year to pay admin-  
20 istrative expenses for that fiscal year to carry  
21 out this subtitle.

22 (5) USE.—

23 (A) IN GENERAL.—Amounts in the Fund  
24 shall be available for discharge of liabilities and  
25 all other expenses of the Administration, includ-



1           ing subsequent transfer to the respective credit  
2           accounts.

3           (B) LIABILITY.—All activities of the Ad-  
4           ministration that could result in a liability for  
5           the United States shall be transparently ac-  
6           counted for and no obligation or liability may  
7           be incurred unless—

8                   (i) the appropriate amounts are trans-  
9                   ferred to credit accounts for activities pur-  
10                  suant to the Federal Credit Reform Act of  
11                  1990 (2 U.S.C. 661a); or

12                  (ii) sufficient amounts are reserved  
13                  within the Fund to account for such liabil-  
14                  ities.

15       (6) INITIAL INVESTMENT.—

16           (A) IN GENERAL.—On transfer of func-  
17           tions pursuant to paragraph (1), out of any  
18           funds in the Treasury not otherwise appro-  
19           priated, the Secretary of the Treasury shall  
20           transfer to the Fund to carry out this subtitle  
21           \$10,000,000,000, to remain available until ex-  
22           pended.

23           (B) RECEIPT AND ACCEPTANCE.—The  
24           Fund shall be entitled to receive and shall ac-  
25           cept, and shall be used to carry out this sub-

1 title, the funds transferred to the Fund under  
2 subparagraph (A), without further appropria-  
3 tion.

4 (7) AUTHORIZATION OF APPROPRIATIONS.—In  
5 addition to funds made available by paragraphs (1)  
6 through (6), there are authorized to be appropriated  
7 to the Fund such sums as are necessary to carry out  
8 this subtitle.

9 (b) PAYMENTS OF LIABILITIES.—Any payment to  
10 discharge liabilities arising from agreements under this  
11 subtitle shall be made exclusively out of the Fund or the  
12 associated credit account, as appropriate.

13 (c) FEES.—

14 (1) IN GENERAL.—Consistent with carrying out  
15 this subtitle, the Administrator shall charge fees or  
16 collect compensation generally in accordance with  
17 commercial rates.

18 (2) AVAILABILITY OF FEES.—All fees collected  
19 by the Administration may be retained by the Ad-  
20 ministration and placed in the Fund and may re-  
21 main available to the Administration, without fur-  
22 ther appropriation or fiscal year limitation, for use  
23 in carrying out this subtitle.

24 (3) BREAKTHROUGH TECHNOLOGIES.—The Ad-  
25 ministration shall charge the minimum amount in

1 fees or compensation practicable for breakthrough  
2 technologies, consistent with the long-term viability  
3 of the Administration, unless the Administration  
4 first determines that a higher charge will not impede  
5 the development of the technology.

6 (4) ALTERNATIVE FEE ARRANGEMENTS.—The  
7 Administration may use such alternative arrange-  
8 ments (such as profit participation, contingent fees,  
9 and other valuable contingent interests) as the Ad-  
10 ministration considers appropriate to compensate the  
11 Administration for the expenses of the Administra-  
12 tion and the risk inherent in the support of the Ad-  
13 ministration.

14 (d) COST TRANSFER AUTHORITY.—Amounts col-  
15 lected by the Administration for the cost of a loan or loan  
16 guarantee shall be transferred by the Administration to  
17 the respective credit program accounts.

18 (e) SUPPLEMENTAL BORROWING AUTHORITY.—In  
19 order to maintain sufficient liquidity for activities author-  
20 ized under section 104(b), the Administration may issue  
21 notes, debentures, bonds, or other obligations for purchase  
22 by the Secretary of the Treasury.

23 (f) PUBLIC DEBT TRANSACTIONS.—For the purpose  
24 of subsection (e)—

1           (1) the Secretary of the Treasury may use as  
2           a public debt transaction the proceeds of the sale of  
3           any securities issued under chapter 31 of title 31,  
4           United States Code; and

5           (2) the purposes for which securities may be  
6           issued under that chapter are extended to include  
7           any purchase under this subsection.

8           (g) MAXIMUM OUTSTANDING HOLDING.—The Sec-  
9           retary of the Treasury shall purchase instruments issued  
10          under subsection (e) to the extent that the purchase would  
11          not increase the aggregate principal amount of the out-  
12          standing holdings of obligations under subsection (e) by  
13          the Secretary of the Treasury to an amount that is greater  
14          than \$2,000,000,000.

15          (h) RATE OF RETURN.—Each purchase of obligations  
16          by the Secretary of the Treasury under this section shall  
17          be on terms and conditions established to yield a rate of  
18          return determined by the Secretary of the Treasury to be  
19          appropriate, taking into account the current average rate  
20          on outstanding marketable obligations of the United  
21          States as of the last day of the month preceding the pur-  
22          chase.

23          (i) SALE OF OBLIGATIONS.—The Secretary of the  
24          Treasury may at any time sell, on terms and conditions  
25          and at prices determined by the Secretary of the Treasury,

1 any of the obligations acquired by the Secretary of the  
2 Treasury under this section.

3 (j) PUBLIC DEBT TRANSACTIONS.—All redemptions,  
4 purchases, and sales by the Secretary of the Treasury of  
5 obligations under this section shall be treated as public  
6 debt transactions of the United States.

7 **SEC. 107. GENERAL PROVISIONS.**

8 (a) IMMUNITY FROM IMPAIRMENT, LIMITATION, OR  
9 RESTRICTION.—

10 (1) IN GENERAL.—All rights and remedies of  
11 the Administration (including any rights and rem-  
12 edies of the Administration on, under, or with re-  
13 spect to any mortgage or any obligation secured by  
14 a mortgage) shall be immune from impairment, limi-  
15 tation, or restriction by or under—

16 (A) any law (other than a law enacted by  
17 Congress expressly in limitation of this para-  
18 graph) that becomes effective after the acquisi-  
19 tion by the Administration of the subject or  
20 property on, under, or with respect to which the  
21 right or remedy arises or exists or would so  
22 arise or exist in the absence of the law; or

23 (B) any administrative or other action that  
24 becomes effective after the acquisition.

1           (2) STATE LAW.—The Administrator may con-  
2           duct the business of the Administration without re-  
3           gard to any qualification or law of any State relating  
4           to incorporation.

5           (b) USE OF OTHER AGENCIES.—With the consent of  
6           a department, establishment, or instrumentality (including  
7           any field office), the Administration may—

8           (1) use and act through any department, estab-  
9           lishment, or instrumentality; or

10          (2) use, and pay compensation for, information,  
11          services, facilities, and personnel of the department,  
12          establishment, or instrumentality.

13          (c) PROCUREMENT.—The Administrator shall be the  
14          senior procurement officer for the Administration for pur-  
15          poses of section 1702 of title 41, United States Code.

16          (d) FINANCIAL MATTERS.—

17          (1) INVESTMENTS.—Funds of the Administra-  
18          tion may be invested in such investments as the  
19          Board of Directors may prescribe.

20          (2) FISCAL AGENTS.—Any Federal reserve  
21          bank or any bank for which, at the time of designa-  
22          tion by the Administrator there is outstanding a des-  
23          ignation by the Secretary of the Treasury as a gen-  
24          eral or other depository of public money, may be  
25          designated by the Administrator as a depository or

1       custodian or as a fiscal or other agent of the Admin-  
2       istration.

3       (e) JURISDICTION.—Notwithstanding section 1349 of  
4 title 28, United States Code, or any other provision of  
5 law—

6           (1) the Administration shall be considered a  
7       corporation covered by sections 1345 and 1442 of  
8       title 28, United States Code;

9           (2) all civil actions to which the Administration  
10      is a party shall be considered to arise under the laws  
11      of the United States, and the district courts of the  
12      United States shall have original jurisdiction of all  
13      such actions, without regard to amount or value, ex-  
14      cept that the courts of appeals shall have jurisdic-  
15      tion over civil actions pertaining to section  
16      103(a)(3); and

17          (3) any civil or other action, case or controversy  
18      in a court of a State, or in any court other than a  
19      district court of the United States, to which the Ad-  
20      ministration is a party may at any time before trial  
21      be removed by the Administration, without the giv-  
22      ing of any bond or security and by following any  
23      procedure for removal of causes in effect at the time  
24      of the removal—

1           (A) to the district court of the United  
2 States for the district and division embracing  
3 the place in which the same is pending; or

4           (B) if there is no such district court, to the  
5 district court of the United States for the dis-  
6 trict in which the principal office of the Admin-  
7 istration is located.

8       (f) PERIODIC REPORTS.—Not later than 1 year after  
9 commencement of operation of the Administration and at  
10 least biannually thereafter, the Administrator shall submit  
11 to the Committee on Energy and Commerce of the House  
12 of Representatives and the Committee on Energy and  
13 Natural Resources of the Senate a report that includes  
14 a description of—

15           (1) the technologies supported by activities of  
16 the Administration; and

17           (2) the performance of the Administration on  
18 meeting the goals developed by the Secretary under  
19 section 102.

20       (g) AUDITS BY THE COMPTROLLER GENERAL.—

21           (1) IN GENERAL.—The programs, activities, re-  
22 ceipts, expenditures, and financial transactions of  
23 the Administration shall be subject to audit by the  
24 Comptroller General of the United States under



1 such rules and regulations as may be prescribed by  
2 the Comptroller General.

3 (2) ACCESS.—The representatives of the Gov-  
4 ernment Accountability Office shall—

5 (A) have access to the personnel and to all  
6 books, accounts, documents, records (including  
7 electronic records), reports, files, and all other  
8 papers, automated data, things, or property be-  
9 longing to, under the control of, or in use by  
10 the Administration, or any agent, representa-  
11 tive, attorney, advisor, or consultant retained by  
12 the Administration, and necessary to facilitate  
13 the audit;

14 (B) be afforded full facilities for verifying  
15 transactions with the balances or securities held  
16 by depositories, fiscal agents, and custodians;

17 (C) be authorized to obtain and duplicate  
18 any such books, accounts, documents, records,  
19 working papers, automated data and files, or  
20 other information relevant to the audit without  
21 cost to the Comptroller General; and

22 (D) have the right of access of the Comp-  
23 troller General to such information under sec-  
24 tion 716(c) of title 31, United States Code.

25 (3) ASSISTANCE AND COST.—

1 (A) IN GENERAL.—For the purpose of con-  
2 ducting an audit under this subsection, the  
3 Comptroller General may, in the discretion of  
4 the Comptroller General, employ by contract,  
5 without regard to section 6101 of title 41,  
6 United States Code, professional services of  
7 firms and organizations of certified public ac-  
8 countants for temporary periods or for special  
9 purposes.

10 (B) REIMBURSEMENT.—

11 (i) IN GENERAL.—On the request of  
12 the Comptroller General, the Administra-  
13 tion shall reimburse the General Account-  
14 ability Office for the full cost of any audit  
15 conducted by the Comptroller General  
16 under this subsection.

17 (ii) CREDITING.—Such reimburse-  
18 ments shall—

19 (I) be credited to the appropria-  
20 tion account entitled “Salaries and  
21 Expenses, Government Accountability  
22 Office” at the time at which the pay-  
23 ment is received; and

24 (II) remain available until ex-  
25 pended.

1 (h) ANNUAL INDEPENDENT AUDITS.—

2 (1) IN GENERAL.—The Administrator shall—

3 (A) have an annual independent audit  
4 made of the financial statements of the Admin-  
5 istration by an independent public accountant  
6 in accordance with generally accepted auditing  
7 standards; and

8 (B) submit to the Secretary the results of  
9 the audit.

10 (2) CONTENT.—In conducting an audit under  
11 this subsection, the independent public accountant  
12 shall determine and report on whether the financial  
13 statements of the Administration—

14 (A) are presented fairly in accordance with  
15 generally accepted accounting principles; and

16 (B) comply with any disclosure require-  
17 ments imposed under this subtitle.

18 (i) FINANCIAL REPORTS.—

19 (1) IN GENERAL.—The Administrator shall  
20 submit to the Secretary annual and quarterly re-  
21 ports of the financial condition and operations of the  
22 Administration, which shall be in such form, contain  
23 such information, and be submitted on such dates as  
24 the Secretary shall require.

1           (2) CONTENTS OF ANNUAL REPORTS.—Each  
2 annual report shall include—

3           (A) financial statements prepared in ac-  
4 cordance with generally accepted accounting  
5 principles;

6           (B) any supplemental information or alter-  
7 native presentation that the Secretary may re-  
8 quire; and

9           (C) an assessment (as of the end of the  
10 most recent fiscal year of the Administration),  
11 signed by the chief executive officer and chief  
12 accounting or financial officer of the Adminis-  
13 tration, of—

14           (i) the effectiveness of the internal  
15 control structure and procedures of the  
16 Administration; and

17           (ii) the compliance of the Administra-  
18 tion with applicable safety and soundness  
19 laws.

20           (3) SPECIAL REPORTS.—The Secretary may re-  
21 quire the Administrator to submit other reports on  
22 the condition (including financial condition), man-  
23 agement, activities, or operations of the Administra-  
24 tion, as the Secretary considers appropriate.

1           (4) ACCURACY.—Each report of financial condi-  
2           tion shall contain a declaration by the Administrator  
3           or any other officer designated by the Board of Di-  
4           rectors of the Administration to make the declara-  
5           tion, that the report is true and correct to the best  
6           of the knowledge and belief of the officer.

7           (5) AVAILABILITY OF REPORTS.—Reports re-  
8           quired under this section shall be published and  
9           made publicly available as soon as is practicable  
10          after receipt by the Secretary.

11         (j) SCOPE AND TERMINATION OF AUTHORITY.—

12           (1) NEW OBLIGATIONS.—The Administrator  
13           shall not initiate any new obligations under this sub-  
14           title on or after January 1, 2039.

15           (2) REVERSION TO SECRETARY.—The authori-  
16           ties and obligations of the Administration shall re-  
17           vert to the Secretary on January 1, 2039.

18                           **Subtitle B—Carbon-Free**  
19                           **Technology Innovation**

20         **SEC. 111. DEMAND EFFICIENCY TECHNOLOGY INNOVATION.**

21           (a) REPORT TO CONGRESS.—Not later than 1 year  
22           after the date of enactment of this section, the Secretary  
23           of Energy shall submit to the Committee on Energy and  
24           Commerce of the House of Representatives and the Com-

1 mittee on Energy and Natural Resources of the Senate  
2 a report describing—

3           (1) recommendations for improving the mod-  
4 eling, operational, and planning practices used for  
5 the bulk electric system in order to better account  
6 for the integration of demand efficiency technologies  
7 and ensuring increased resiliency, mitigating peak  
8 system demand, and avoiding or deferring trans-  
9 mission investments; and

10           (2) an assessment of existing regional and  
11 interregional transmission planning and siting proc-  
12 esses and whether such processes are adequate with  
13 respect to the deployment of demand efficiency tech-  
14 nologies.

15           (b) CONSULTATION.—The report under subsection  
16 (a) may be produced in consultation and coordination with  
17 the National Academy of Sciences.

18           (c) DEFINITION.—In this section, the term “demand  
19 efficiency technologies” includes—

20           (1) advanced metering infrastructure that  
21 records electricity use at defined intervals, ranging  
22 from hourly to real-time and provides data to elec-  
23 tric utilities and customers, and which may include  
24 2-way communications and instantaneous data  
25 transmission;

1           (2) behind-the-meter smart devices with aggrega-  
2           gation and control capabilities, which may include  
3           thermostats, heat pumps, lighting controls, electric  
4           vehicle chargers, and other appliances that can be  
5           equipped with communications and control capabili-  
6           ties;

7           (3) power flow control and voltage management  
8           equipment and methods that allow grid operators to  
9           adjust remotely and in real time the amount of elec-  
10          tricity flowing and manage the voltage on trans-  
11          mission lines;

12          (4) dynamic line rating technologies and meth-  
13          ods that can be used to determine the maximum  
14          power flow capacity and real-time constraints and  
15          conditions on a transmission line; and

16          (5) dynamic transformer rating technologies  
17          and methods that allow electric companies and grid  
18          operators to understand the real-time operating con-  
19          ditions of transformers.

20 **SEC. 112. SUPER HOT ROCK GEOTHERMAL ENERGY TECH-**  
21 **NOLOGY INNOVATION.**

22          (a) DEMONSTRATION PROJECTS.—Not later than 1  
23          year after the date of enactment of this section, the Sec-  
24          retary of Energy shall enter into agreements to carry out  
25          1 or more demonstration projects of super hot rock engi-

1 neered geothermal energy systems under which water is  
2 injected into the earth at a depth at which temperatures  
3 exceed 400 degrees Celsius and water reaches a supercrit-  
4 ical state.

5 (b) REPORT TO CONGRESS.—Not later than 3 years  
6 after the date of enactment of this section, the Secretary  
7 of Energy shall submit a report to Congress describing—

8 (1) the demonstration projects described under  
9 subsection (a);

10 (2) the result of said demonstration projects;

11 (3) an assessment of the potential for utiliza-  
12 tion of super hot rock geothermal energy; and

13 (4) a recommendation of next steps to explore  
14 the potential for the utilization of super hot rock  
15 geothermal energy.

16 (c) AUTHORIZATION OF APPROPRIATIONS.—There  
17 are authorized to be appropriated to the Secretary of En-  
18 ergy to carry out this section \$70,000,000 per fiscal year  
19 for each of the 5 fiscal years beginning after the date of  
20 enactment of this section.

21 **SEC. 113. ZERO CARBON FUEL TECHNOLOGY INNOVATION.**

22 (a) CONSORTIA.—The Secretary of Energy shall es-  
23 tablish 1 or more consortia to conduct research and devel-  
24 opment in order to facilitate the large-scale commercial  
25 manufacture of efficient, low-cost, durable devices that use



1 electricity to split water into hydrogen and oxygen. Activi-  
2 ties conducted under this section shall focus on materials  
3 and component integration and manufacturing, and may  
4 include—

- 5 (1) cell modeling and characterization;
- 6 (2) scale-up and integration studies; and
- 7 (3) membrane studies.

8 (b) REPORT TO CONGRESS.—Not later than 1 year  
9 after the date of enactment of this section, the Secretary  
10 of Energy shall provide a report to the Committee on En-  
11 ergy and Commerce of the House of Representatives and  
12 the Committee on Energy and Natural Resources of the  
13 Senate that shall include—

14 (1) an inventory of existing pipeline assets in  
15 the United States, including a description of the ma-  
16 terials used in and the quality of the pipeline net-  
17 works;

18 (2) an assessment of the capacity of pipeline  
19 networks to transport hydrogen and hydrogen car-  
20 riers;

21 (3) an assessment of the probability that em-  
22 brittlement could occur within pipelines of the type  
23 and quality identified under paragraph (1) and an  
24 identification of the methodologies used in order to  
25 conduct such assessments;

1           (4) an assessment of the cost of pipeline inlay  
2           with a range of materials to allow for the transpor-  
3           tation of hydrogen and hydrogen carriers;

4           (5) an identification of potential high-risk areas  
5           within existing infrastructure that deserve special at-  
6           tention with respect to safety and reliability; and

7           (6) a safety protocol for assessing pipeline ma-  
8           terials and system pressures in existing natural gas  
9           pipeline systems to determine their ability to safely  
10          distribute blends of natural gas and hydrogen and  
11          the potential for pipeline embrittlement, and such a  
12          protocol may include guidelines for conducting rou-  
13          tine pipeline maintenance and inspection.

14          (c) AUTHORIZATION OF APPROPRIATIONS.—There  
15          are authorized to be appropriated to the Secretary of En-  
16          ergy to carry out this section \$10,000,000 per fiscal year  
17          for each of the 5 fiscal years beginning after the date of  
18          enactment of this section.

19          **SEC. 114. ADVANCED NUCLEAR REACTOR INNOVATION.**

20          (a) NATIONAL REACTOR INNOVATION CENTER.—

21                 (1) Section 958(a) of the Energy Policy Act of  
22                 2005 (42 U.S.C. 16278(a)) is amended by striking  
23                 “to be proposed and funded, in whole or in part, by  
24                 the private sector”.

1           (2) Section 958 of the Energy Policy Act of  
2           2005 (42 U.S.C. 16278) is amended by adding at  
3           the end the following:

4           “(h) AUTHORIZATION OF APPROPRIATIONS.—There  
5           are authorized to be appropriated to the Secretary to carry  
6           out this section \$40,000,000 for each of fiscal years 2023  
7           through 2027.”.

8           (b) ADVANCED REACTOR DEMONSTRATION PRO-  
9           GRAM.—

10           (1) Section 959A(c) of the Energy Policy Act of  
11           2005 (42 U.S.C. 16279a(c)) is amended—

12                   (A) in paragraph (9)(C), by striking “and”  
13                   at the end;

14                   (B) in paragraph (10)(F), by striking the  
15                   period at the end and inserting “; and”; and

16                   (C) by adding the following:

17                   “(11) carry out not less than four demonstra-  
18                   tion projects of any given reactor configuration in-  
19                   volving new or significantly improved equipment,  
20                   process, or production method.”.

21           (2) Section 959A of the Energy Policy Act of  
22           2005 (42 U.S.C. 16279a) is amended by striking  
23           subsection (f) and inserting the following:

24           “(f) AUTHORIZATION OF APPROPRIATIONS.—There  
25           are authorized to be appropriated to the Secretary to carry

1 out the program under this subsection, \$1,500,000,000  
2 for each of fiscal years 2023 through 2027.”.

3 **SEC. 115. NATIONAL OFFSHORE WIND ENERGY GOAL.**

4 It shall be a goal of the United States to deploy—

5 (1) 12.5 gigawatts of offshore wind energy by  
6 January 1, 2025; and

7 (2) 30 gigawatts of offshore wind energy by  
8 January 1, 2030.

9 **TITLE II—ZERO-EMISSION**  
10 **ELECTRICITY STANDARD**

11 **SEC. 200. PURPOSE.**

12 The purpose of this title is to achieve 100 percent  
13 net zero-emission electricity between 2035 and 2050, de-  
14 pending on the availability of technology.

15 **Subtitle A—Zero-Emission**  
16 **Electricity Standard**

17 **SEC. 201. DEFINITIONS.**

18 In this subtitle:

19 (1) ADMINISTRATOR.—The term “Adminis-  
20 trator” means the Administrator of the Environ-  
21 mental Protection Agency.

22 (2) AFFILIATE.—The term “affiliate” has the  
23 meaning given such term in section 1262 of the En-  
24 ergy Policy Act of 2005 (42 U.S.C. 16451).

1           (3) ASSOCIATE COMPANY.—The term “associate  
2           company” has the meaning given such term in sec-  
3           tion 1262 of the Energy Policy Act of 2005 (42  
4           U.S.C. 16451).

5           (4) BEHIND-THE-METER GENERATION SYS-  
6           TEM.—The term “behind-the-meter generation sys-  
7           tem” means a system of generation of electric en-  
8           ergy that operates on the electric consumer side of  
9           the applicable utility meter.

10          (5) BENEFICIAL ELECTRIFICATION-RELATED  
11          REDUCTION.—The term “beneficial electrification-re-  
12          lated reduction” means the net reduction of the ag-  
13          gregate greenhouse gas emissions attributable to a  
14          retail electricity supplier and an electric consumer as  
15          the result of the replacement of a nonelectric energy  
16          source used by the electric consumer with electric  
17          energy provided by the retail electricity supplier, in-  
18          cluding for the purpose of transportation, space  
19          heating, water heating, or industrial processes.

20          (6) CARBON DIOXIDE EQUIVALENT.—The term  
21          “carbon dioxide equivalent” means the number of  
22          metric tons of carbon dioxide emissions with the  
23          same global warming potential over a 20-year period  
24          as 1 metric ton of another greenhouse gas, includ-  
25          ing, in determining such global warming potential—

1 (A) the effects of climate-carbon feedbacks  
2 for both carbon dioxide and the other green-  
3 house gas, as determined in accordance with  
4 the Fifth Assessment Report of the Intergov-  
5 ernmental Panel on Climate Change; and

6 (B) for methane, the effect of carbon diox-  
7 ide resulting from methane oxidation in the at-  
8 mosphere.

9 (7) CARBON INTENSITY.—The term “carbon in-  
10 tensity” means the carbon dioxide equivalent emis-  
11 sions associated with the generation of 1 megawatt-  
12 hour of electric energy, as determined by the Admin-  
13 istrator under section 204.

14 (8) ELECTRIC CONSUMER.—The term “electric  
15 consumer” has the meaning given such term in sec-  
16 tion 3 of the Public Utility Regulatory Policies Act  
17 of 1978 (16 U.S.C. 2602).

18 (9) FEDERAL POWER MARKETING ADMINISTRA-  
19 TION.—The term “Federal Power Marketing Admin-  
20 istration” means the Bonneville Power Administra-  
21 tion, the Southeastern Power Administration, the  
22 Southwestern Power Administration, or the Western  
23 Area Power Administration.

24 (10) GENERATING UNIT.—The term “gener-  
25 ating unit” means a unit or system of units that—

1 (A) generates electric energy that is con-  
2 sumed in the United States;

3 (B) generates not fewer than 20 megawatt-  
4 hours of electric energy per calendar year; and

5 (C)(i) delivers electric energy to the elec-  
6 tric grid; or

7 (ii) in the case of a behind-the-meter gen-  
8 eration system—

9 (I) delivers electric energy to the elec-  
10 tric grid; or

11 (II) generates electric energy that is  
12 consumed onsite for a useful purpose other  
13 than for generating electric energy.

14 (11) GENERATOR.—The term “generator”  
15 means the owner or operator of a generating unit.

16 (12) GREENHOUSE GAS.—The term “green-  
17 house gas” includes each of the following:

18 (A) Carbon dioxide.

19 (B) Methane.

20 (C) Nitrous oxide.

21 (D) Sulfur hexafluoride.

22 (E) Any hydrofluorocarbon.

23 (F) Any perfluorocarbon.

24 (G) Nitrogen trifluoride.

1 (H) Any fully fluorinated linear, branched,  
2 or cyclic—

3 (i) alkane;

4 (ii) ether;

5 (iii) tertiary amine; or

6 (iv) aminoether.

7 (I) Any perfluoropolyether.

8 (J) Any hydrofluoropolyether.

9 (K) Any other fluorocarbon, except for a  
10 fluorocarbon with a vapor pressure of less than  
11 1 mm of Hg absolute at 25 degrees Celsius.

12 (13) QUALIFIED COMBINED HEAT AND POWER  
13 SYSTEM.—The term “qualified combined heat and  
14 power system” means a system that—

15 (A) uses the same energy source for the si-  
16 multaneous or sequential generation of electric  
17 energy and thermal energy;

18 (B) produces at least—

19 (i) 20 percent of the useful energy of  
20 the system in the form of electric energy;  
21 and

22 (ii) 20 percent of the useful energy of  
23 the system in the form of useful thermal  
24 energy;



1 (C) to the extent that the system uses bio-  
2 mass, uses only qualified renewable biomass;  
3 and

4 (D) operates with an energy efficiency per-  
5 centage, as determined in accordance with sec-  
6 tion 48(c)(3)(C)(i) of the Internal Revenue  
7 Code of 1986, of greater than 60 percent on a  
8 year-round basis.

9 (14) QUALIFIED ELECTRICITY GENERATION.—

10 (A) IN GENERAL.—The term “qualified  
11 electricity generation” means the number of  
12 megawatt-hours of electric energy that a gener-  
13 ator generates using a generating unit and—

14 (i) sells directly or indirectly for use  
15 by electric consumers for purposes other  
16 than resale; or

17 (ii) that is consumed onsite for a use-  
18 ful purpose other than for generating elec-  
19 tric energy.

20 (B) AFFILIATE SALES.—For purposes of  
21 calculating the quantity of electric energy sold  
22 by a retail electricity supplier under this para-  
23 graph, the quantity of electric energy sold—

24 (i) by an affiliate of the retail elec-  
25 tricity supplier, or an associate company of

1 the retail electricity supplier, to an electric  
2 consumer (other than to a lessee or tenant  
3 of the affiliate or associate company) shall  
4 be treated as sold by the retail electricity  
5 supplier; and

6 (ii) by such retail electricity supplier  
7 to an affiliate, lessee, or tenant of the re-  
8 tail electricity supplier shall not be consid-  
9 ered to be a sale to an electric consumer.

10 (15) QUALIFIED LOW-CARBON FUEL.—

11 (A) IN GENERAL.—The term “qualified  
12 low-carbon fuel” means a fuel that—

13 (i) is produced through any process  
14 that significantly limits or avoids green-  
15 house gas emissions; and

16 (ii) does not release greenhouse gas  
17 emissions during combustion.

18 (B) INCLUSION.—The term “qualified low-  
19 carbon fuel” includes, subject to subparagraph

20 (A)—

21 (i) ammonia; and

22 (ii) hydrogen.

23 (16) QUALIFIED RENEWABLE BIOMASS.—

24 (A) IN GENERAL.—The term “qualified re-  
25 newable biomass” means—

1 (i) any crop byproduct, or crop res-  
2 idue, harvested from actively managed, or  
3 fallow, agricultural nonforested land that  
4 was cleared before January 1, 2021, if the  
5 harvesting of the byproduct or residue does  
6 not lead to a net decline in soil organic  
7 matter for the applicable land;

8 (ii) any cellulose, hemicellulose, or  
9 lignin that is derived from a woody or  
10 nonwoody plant that is planted for “closed-  
11 loop biomass”, as defined in section  
12 45(c)(2) of the Internal Revenue Code of  
13 1986, on land that was, as of January 1,  
14 2021—

15 (I) actively managed cropland or  
16 fallow and nonforested cropland, as  
17 defined by the Department of Agri-  
18 culture;

19 (II) a brownfield site (as defined  
20 in section 101(39) of the Comprehen-  
21 sive Environmental Response, Com-  
22 pensation, and Liability Act of 1980  
23 (42 U.S.C. 9601(39))); or

24 (III) an abandoned mine site;

- 1 (iii) nonhazardous algal or other  
2 micro-crop matter;
- 3 (iv) waste—
- 4 (I) that is burned in a qualified  
5 combined heat and power system; and
- 6 (II) that is—
- 7 (aa) a gas that is primarily  
8 composed of methane, and that  
9 has been generated entirely from  
10 the decomposition of organic  
11 matter, including sewage, food  
12 waste, animal waste, and agricul-  
13 tural waste;
- 14 (bb) nonhazardous land-  
15 scape or right-of-way trimmings;
- 16 (cc) vegetative matter re-  
17 moved from an area located not  
18 more than 200 yards from a  
19 building, residence, or camp-  
20 ground for the purpose of pro-  
21 tecting structures from wildfire;
- 22 (dd) any byproduct of a  
23 wood mill or paper mill oper-  
24 ation, including lignin in spent  
25 pulping liquors, that is dem-

1 onstrated to otherwise be burned  
2 for energy onsite;

3 (ee) plant material removed  
4 for the purposes of invasive or  
5 noxious plant species control; or

6 (ff) downed wood from ex-  
7 treme weather events; and

8 (v) food waste.

9 (B) LIMIT OF INCLUSION OF INVASIVE  
10 SPECIES.—Except as provided in subparagraph  
11 (A)(iv)(II)(ee), the term “qualified renewable  
12 biomass” does not include any matter that the  
13 Secretary of Agriculture, in consultation with  
14 other Federal or State departments and agen-  
15 cies the Secretary determines appropriate, de-  
16 termines is derived from—

17 (i) a plant that is invasive or noxious;

18 or

19 (ii) a species or varieties of plants  
20 that are potentially invasive.

21 (C) OVERSIGHT.—The Administrator shall  
22 consult with the Chiefs of the United States  
23 Forest Service, the Fish and Wildlife Service,  
24 and the Natural Resources Conservation Serv-

1 ice in implementing subparagraphs (A) and  
2 (B).

3 (D) EMISSIONS.—The term “qualified re-  
4 newable biomass” does not include any biomass  
5 the processing or combustion of which results in  
6 emissions of—

7 (i) an air pollutant for which air qual-  
8 ity criteria has been issued under section  
9 108 of the Clean Air Act (42 U.S.C.  
10 7408); or

11 (ii) a hazardous air pollutant (as de-  
12 fined in section 112 of the Clean Air Act  
13 (42 U.S.C. 7412(b))).

14 (17) QUALIFIED WASTE-TO-ENERGY.—The  
15 term “qualified waste-to-energy” means electric en-  
16 ergy generated—

17 (A) from the combustion of—

18 (i) post-recycled municipal solid waste,  
19 provided such combustion does not result  
20 in emissions of—

21 (I) an air pollutant for which air  
22 quality criteria has been issued under  
23 section 108 of the Clean Air Act (42  
24 U.S.C. 7408); or

- 1 (II) a hazardous air pollutant (as  
2 defined in section 112 of the Clean  
3 Air Act (42 U.S.C. 7412));
- 4 (ii) gas produced from the gasification  
5 or pyrolyzation of post-recycled municipal  
6 solid waste;
- 7 (iii) waste described in paragraph  
8 (16)(A)(iv)(II);
- 9 (iv) other animal waste or animal by-  
10 products;
- 11 (v) food waste;
- 12 (vi) a gas that is primarily composed  
13 of methane, and that has been generated  
14 entirely from the decomposition of organic  
15 matter, including sewage, food waste, ani-  
16 mal waste, and agricultural waste; or
- 17 (vii) if diverted from or separated  
18 from other waste out of a municipal waste  
19 stream—
- 20 (I) paper products that are not  
21 commonly recyclable;
- 22 (II) solid-wood yard waste, pal-  
23 lets, or crates; or
- 24 (III) manufacturing and con-  
25 struction debris; and

1           (B) at a facility that the Administrator has  
2 certified, within the past 3 years, is in compli-  
3 ance with all applicable Federal and State envi-  
4 ronmental permits.

5           (18) RETAIL ELECTRICITY SUPPLIER.—The  
6 term “retail electricity supplier”, as determined for  
7 each calendar year, means an entity in the United  
8 States that sold not fewer than 20 megawatt-hours  
9 of electric energy to electric consumers for purposes  
10 other than resale during the preceding calendar  
11 year.

12           (19) SALE.—The term “sale”, when used with  
13 respect to electric energy, has the meaning given  
14 such term in section 3(13) of the Public Utility Reg-  
15 ulatory Policies Act of 1978 (16 U.S.C. 2602(13)).

16           (20) STATE.—Except as otherwise provided in  
17 this title, the term “State” means a State of the  
18 United States and any district, commonwealth, terri-  
19 tory, or possession of the United States.

20           (21) ZERO-EMISSION ELECTRICITY.—The term  
21 “zero-emission electricity” means the amount, in  
22 megawatt-hours, of electric energy generated by a  
23 generating unit that is not associated with the re-  
24 lease of greenhouse gases into the atmosphere, as  
25 calculated by multiplying—



1 (A) the qualified electricity generation of  
2 the generating unit; by

3 (B) the number that equals—

4 (i) 1.0; less

5 (ii) the quotient obtained by divid-  
6 ing—

7 (I) the carbon intensity of the  
8 generating unit; by

9 (II) 0.82.

10 (22) ZERO-EMISSION ELECTRICITY CREDIT.—

11 The term “zero-emission electricity credit” means a  
12 credit issued pursuant to section 204.

13 **SEC. 202. ZERO-EMISSION ELECTRICITY REQUIREMENT.**

14 (a) ZERO-EMISSION ELECTRICITY REQUIREMENT.—

15 (1) CREDIT SUBMISSION REQUIREMENT.—

16 (A) IN GENERAL.—Except as otherwise  
17 provided in this section, effective beginning with  
18 calendar year 2023, for each calendar year, not  
19 later than June 1 of the following calendar  
20 year, each retail electricity supplier shall submit  
21 to the Administrator a quantity of zero-emis-  
22 sion electricity credits that is equal to—

23 (i) for each of calendar years 2023  
24 and 2024, the quantity of zero-emission  
25 electricity credits determined under para-

1 graph (3) for the retail electricity supplier  
2 for such calendar year; and

3 (ii) for calendar year 2025 and each  
4 calendar year thereafter, the average of the  
5 quantity of zero-emission electricity credits  
6 determined under paragraph (3) for the re-  
7 tail electricity supplier for such calendar  
8 year and the two prior calendar years.

9 (B) ACCOUNTING FOR UNDERCOMPLIANCE  
10 DUE TO ENERGY LOSS.—Notwithstanding sub-  
11 paragraph (A)(ii), beginning in 2035, and for  
12 each calendar year thereafter, if the percentage  
13 of national undercompliance due to energy loss  
14 is greater than 1 for the calendar year, a retail  
15 electricity supplier that has a percentage of in-  
16 dividual undercompliance due to energy loss  
17 that is greater than 1 for the calendar year  
18 shall submit to the Administrator a quantity of  
19 zero-emission electricity credits that is equal to  
20 the number obtained by dividing—

21 (i) the quantity of zero-emission elec-  
22 tricity credits described in subparagraph  
23 (A)(ii); by

24 (ii) the number that equals 1 minus—

1 (I) the percentage of national  
2 undercompliance due to energy loss  
3 for the calendar year; divided by

4 (II) 100.

5 (2) VOLUNTARY ASSIGNMENT OF COMPLIANCE  
6 OBLIGATION BY PUBLIC POWER UTILITIES AND  
7 ELECTRIC COOPERATIVES.—Any retail electricity  
8 supplier that is an electric cooperative, a State, or  
9 any political subdivision of a State, may elect to  
10 enter into an agreement with a political subdivision  
11 of a State, an electric cooperative that has an obliga-  
12 tion to serve such retail electricity supplier, or a gen-  
13 erator, to assign any reporting or compliance obliga-  
14 tion under this title to such other political subdivi-  
15 sion of a State, electric cooperative, or generator. An  
16 assignment made under this paragraph shall be es-  
17 tablished through a binding agreement executed  
18 among the relevant parties.

19 (3) QUANTITY OF ZERO-EMISSION ELECTRICITY  
20 CREDITS.—

21 (A) IN GENERAL.—For each calendar year,  
22 the Administrator shall determine a quantity of  
23 zero-emission electricity credits for a retail elec-  
24 tricity supplier that is equal to the product ob-  
25 tained by multiplying—

1 (i) the total quantity of electric en-  
2 ergy, in megawatt-hours, consumed by  
3 electric consumers of the retail electricity  
4 supplier during the calendar year, that is  
5 provided by the retail electricity supplier or  
6 by a behind-the-meter generation system,  
7 as reported under subsection (b); by

8 (ii) the minimum percentage of zero-  
9 emission electricity for the calendar year.

10 (B) DEDUCTION FOR BENEFICIAL ELEC-  
11 TRIFICATION.—

12 (i) DEDUCTION.—To account for ben-  
13 efitial electrification, in calculating the  
14 total quantity of electric energy consumed  
15 by electric consumers of a retail electricity  
16 supplier under subparagraph (A)(i), the  
17 Administrator shall deduct a quantity, in  
18 megawatt-hours, determined in accordance  
19 with clause (ii).

20 (ii) DETERMINATION.—The Adminis-  
21 trator shall make a determination of the  
22 quantity of electric energy, in megawatt-  
23 hours, associated with beneficial electrifica-  
24 tion-related reductions for a retail elec-  
25 tricity supplier for a calendar year. Such

1 determination shall be made on the basis  
2 of—

3 (I) the carbon intensity of the  
4 electric energy sold by the retail elec-  
5 tricity supplier that results in such  
6 beneficial electrification-related reduc-  
7 tions; and

8 (II) the greenhouse gas emissions  
9 of nonelectric energy sources that  
10 were replaced with electric energy pro-  
11 vided by the retail electricity supplier  
12 which results in such beneficial elec-  
13 trification-related reductions.

14 (iii) PHASE-OUT OF DEDUCTION.—In  
15 determining the quantity of electric energy  
16 to deduct under clause (ii), the Adminis-  
17 trator shall ensure that the deduction is re-  
18 duced to zero at the same rate that the  
19 minimum percentage of zero-emission elec-  
20 tricity increases to 100 percent.

21 (C) SYSTEM SUPPORT RESOURCE.—For  
22 any calendar year in which a generating unit  
23 that is owned by a retail electricity supplier has  
24 been designated a System Support Resource by  
25 the Federal Energy Regulatory Commission

1 and is thereby required, by an Independent Sys-  
2 tem Operator or Regional Transmission Organi-  
3 zation, or under a State-regulated resource  
4 planning process, to remain in operation be-  
5 cause retirement of the generating unit would  
6 harm the reliability of the electric energy trans-  
7 mission system, in calculating the total quantity  
8 of electric energy consumed by electric con-  
9 sumers of the retail electricity supplier under  
10 subparagraph (A)(i), the Administrator shall  
11 deduct the quantity of megawatt-hours of elec-  
12 tricity generated by such generating unit during  
13 such calendar year.

14 (4) AVERAGE CREDIT PRICES.—For each cal-  
15 endar year, the Administrator shall—

16 (A) analyze the market for zero-emission  
17 electricity credits in order to determine the av-  
18 erage annual price of zero-emission electricity  
19 credits for the calendar year;

20 (B) determine whether the average annual  
21 price of a zero-emission electricity credit deter-  
22 mined under subparagraph (A) is less than the  
23 breakthrough credit price under paragraph (6)  
24 for the calendar year; and

1 (C) publish the determinations made under  
2 subparagraphs (A) and (B) by not later than  
3 January 31 of the year following the calendar  
4 year.

5 (5) DEFINITIONS.—In this subsection:

6 (A) ANNUAL PERCENTAGE INCREASE.—

7 (i) IN GENERAL.—Except as provided  
8 in clause (ii), the term “annual percentage  
9 increase” means, with respect to a retail  
10 electricity supplier, the product obtained by  
11 multiplying—

12 (I) the difference between 100  
13 percent and the baseline zero-emission  
14 electricity percentage; by—

15 (II)  $\frac{1}{27}$ .

16 (ii) ACCELERATED ANNUAL PERCENT-  
17 AGE INCREASE.—Notwithstanding clause  
18 (i), beginning with calendar year 2026, if  
19 the Administrator determines under para-  
20 graph (4) that the average annual price of  
21 a zero-emission electricity credit for each  
22 of the 3 or more calendar years prior to a  
23 calendar year (in this clause referred to as  
24 “the applicable calendar year”) is less than  
25 the breakthrough credit price for the appli-

1 cable calendar year, the term “annual per-  
2 centage increase” means, for the 1 cal-  
3 endar year that begins 4 years after the  
4 end of the applicable calendar year, the  
5 percentage that is—

6 (I) twice the percentage described  
7 in clause (i) if the period of break-  
8 through credit prices is 3 consecutive  
9 calendar years;

10 (II) three times the percentage  
11 described in clause (i) if the period of  
12 breakthrough credit prices is 4 con-  
13 secutive calendar years;

14 (III) four times the percentage  
15 described in clause (i) if the period of  
16 breakthrough credit prices is 5 con-  
17 secutive calendar years;

18 (IV) five times the percentage de-  
19 scribed in clause (i) if the period of  
20 breakthrough credit prices is 6 con-  
21 secutive calendar years; and

22 (V) six times the percentage de-  
23 scribed in clause (i) if the period of  
24 breakthrough credit prices is 7 con-  
25 secutive calendar years.



1 (B) BASELINE ZERO-EMISSION ELEC-  
2 TRICITY PERCENTAGE.—

3 (i) IN GENERAL.—The term “baseline  
4 zero-emission electricity percentage”  
5 means, with respect to a retail electricity  
6 supplier, the average percentage of the  
7 electric energy consumed by all electric  
8 consumers of the retail electricity supplier  
9 that is zero-emission electricity during cal-  
10 endar years 2017, 2018, and 2019.

11 (ii) ELECTION.—For any retail elec-  
12 tricity supplier served by an Independent  
13 System Operator or a Regional Trans-  
14 mission Organization, or participating in a  
15 joint unit commitment and centralized eco-  
16 nomic dispatch system regulated by the  
17 Federal Energy Regulatory Commission,  
18 the retail electricity supplier may elect to  
19 set its baseline zero-emission electricity  
20 percentage under clause (i) on the basis of  
21 the zero-emission electricity and electric  
22 energy consumed by either—

23 (I) all electric consumers of the  
24 retail electricity supplier; or

1 (II) all electric consumers served  
2 by the Independent System Operator,  
3 Regional Transmission Organization,  
4 or the applicable joint unit commit-  
5 ment and centralized economic dis-  
6 patch system that serves the retail  
7 electricity supplier.

8 (iii) NOTIFICATION OF ELECTION.—A  
9 retail electricity supplier shall inform the  
10 Administrator of its election under clause  
11 (ii) not later than 180 days after the date  
12 of enactment of this Act.

13 (C) BREAKTHROUGH CREDIT PRICE.—The  
14 term “breakthrough credit price” means, for a  
15 calendar year, the price listed in the table under  
16 paragraph (6) labeled “breakthrough credit  
17 price”.

18 (D) MINIMUM PERCENTAGE OF ZERO-  
19 EMISSION ELECTRICITY.—The term “minimum  
20 percentage of zero-emission electricity” means,  
21 with respect to a retail electricity supplier—

22 (i) for each of calendar years 2023  
23 and 2024, the baseline zero-emission elec-  
24 tricity percentage;

1 (ii) for each of calendar years 2025  
2 through 2050, the amount, not to exceed  
3 100 percent, obtained by adding—

4 (I) the minimum percentage of  
5 zero-emission electricity for the pre-  
6 vious calendar year; and

7 (II) the annual percentage in-  
8 crease; and

9 (iii) for each calendar year after 2050,  
10 100 percent.

11 (E) PERCENTAGE OF INDIVIDUAL UNDER-  
12 COMPLIANCE DUE TO ENERGY LOSS.—The term  
13 “percentage of individual undercompliance due  
14 to energy loss” means, with respect to a cal-  
15 endar year, for a retail electricity supplier, the  
16 number that is equal to—

17 (i) 100; multiplied by

18 (ii) the number that is equal to—

19 (I) the number that is obtained  
20 by dividing—

21 (aa) the number of zero-  
22 emission electricity credits that  
23 the retail electricity supplier  
24 would be required to submit to

1 the Administrator but for para-  
2 graph (1)(B); by

3 (bb) the number of mega-  
4 watt-hours of electric energy sold  
5 by the retail electricity supplier  
6 to electric consumers; less

7 (II) the number that is obtained  
8 by dividing—

9 (aa) the number of zero-  
10 emission electricity credits award-  
11 ed by the Administrator to gen-  
12 erators for the electric energy  
13 that is sold by the retail elec-  
14 tricity supplier to electric con-  
15 sumers; by

16 (bb) the number of mega-  
17 watt-hours of electric energy gen-  
18 erated by the generators that is  
19 provided to the retail electricity  
20 supplier for sale to electric con-  
21 sumers.

22 (F) PERCENTAGE OF NATIONAL UNDER-  
23 COMPLIANCE DUE TO ENERGY LOSS.—The term  
24 “percentage of national undercompliance due to

1 energy loss” means, with respect to a calendar  
2 year, the number that is equal to—

3 (i) 100; multiplied by

4 (ii) the number that is equal to—

5 (I) the number that is obtained  
6 by dividing—

7 (aa) the total number of  
8 zero-emission electricity credits  
9 that all retail electricity suppliers  
10 would be required to submit but  
11 for paragraph (1)(B); by

12 (bb) the total number of  
13 megawatt-hours of electric energy  
14 sold by retail electricity suppliers  
15 to electric consumers; less

16 (II) the number that is obtained  
17 by dividing—

18 (aa) the total number of  
19 zero-emission electricity credits  
20 awarded by the Administrator to  
21 all generators; by

22 (bb) the total number of  
23 megawatt-hours of electric energy  
24 generated by all generators.

1 (G) PERIOD OF BREAKTHROUGH CREDIT  
 2 PRICES.—The term “period of breakthrough  
 3 credit prices” means the number of consecutive  
 4 calendar years for which the average annual  
 5 price of a zero-emission electricity credit is less  
 6 than the breakthrough credit price for each  
 7 such year, as determined by the Administrator  
 8 under paragraph (4).

9 (6) ALTERNATIVE COMPLIANCE PAYMENTS;  
 10 BREAKTHROUGH CREDIT PRICES.—For a calendar  
 11 year, amounts of alternative compliance payments  
 12 and breakthrough credit prices are as follows:

Calendar year	Breakthrough Credit Price	Alternative compliance payment
2023	\$10.75	\$21.50
2024	\$11.50	\$23.00
2025	\$12.25	\$24.50
2026	\$13.00	\$26.00
2027	\$13.75	\$27.50
2028	\$14.50	\$29.00
2029	\$15.25	\$30.50
2030	\$16.00	\$32.00
2031	\$16.75	\$33.50
2032	\$17.50	\$35.00
2033	\$18.25	\$36.50
2034	\$19.00	\$38.00
2035	\$19.75	\$39.50
2036	\$20.50	\$41.00
2037	\$21.25	\$42.50
2038	\$22.00	\$44.00
2039	\$22.75	\$45.50
2040	\$23.50	\$47.00
2041	\$24.25	\$48.50
2042	\$25.00	\$50.00
2043	\$25.75	\$51.50
2044	\$26.50	\$53.00
2045	\$27.25	\$54.50
2046	\$28.00	\$56.00
2047	\$28.75	\$57.50

Calendar year	Breakthrough Credit Price	Alternative compliance payment
2048	\$29.50	\$59.00
2049	\$30.25	\$60.50
2050 and each calendar year thereafter	\$31.00	\$62.00.

1 (b) REPORTING ON BEHIND-THE-METER GENERA-  
2 TION SYSTEMS.—Effective beginning in calendar year  
3 2023, each retail electricity supplier serving one or more  
4 behind-the-meter generation systems may, not later than  
5 January 1 of each calendar year, submit to the Adminis-  
6 trator—

7 (1) verification of the carbon intensity of be-  
8 hind-the-meter generation systems connected to the  
9 retail electricity supplier; and

10 (2) the quantity of electric energy generated by  
11 each such behind-the-meter generation system that  
12 is consumed for a useful purpose by electric con-  
13 sumers served by the retail electricity supplier.

14 (c) ALTERNATIVE COMPLIANCE PAYMENTS.—A re-  
15 tail electricity supplier may satisfy the requirements of  
16 subsection (a) with respect to a calendar year, in whole  
17 or in part, by submitting to the Administrator, in lieu of  
18 each zero-emission electricity credit that would otherwise  
19 be due, an alternative compliance payment equal to the  
20 amount determined for such calendar year in accordance  
21 with the table in subsection (a)(6), adjusted for inflation.

1 (d) DETERMINATION OF INADEQUATE AVAILABILITY  
2 OF ZERO-EMISSION ELECTRICITY TECHNOLOGY.—

3 (1) PETITION FOR DETERMINATION.—A retail  
4 electricity supplier (referred to in this subsection as  
5 the “petitioner”) may submit to the Administrator a  
6 petition for the Administrator to make a determina-  
7 tion of inadequate availability of technology relating  
8 to zero-emission electricity with respect to a calendar  
9 year.

10 (2) CONDITIONS.—The Administrator shall  
11 make an affirmative determination under paragraph  
12 (1) (referred to in this title as a “determination of  
13 inadequate availability of technology”) for a calendar  
14 year only if—

15 (A) a petition is submitted to the Adminis-  
16 trator by January 31 of the following calendar  
17 year;

18 (B) the average annual price of zero-emis-  
19 sion electricity credits is equal to or greater  
20 than the alternative compliance payment under  
21 subsection (a)(6) for such calendar year;

22 (C) the Administrator determines the num-  
23 ber of megawatt-hours of zero-emission elec-  
24 tricity that could have been generated or pur-  
25 chased by the petitioner using technology that



1 was available during the time interval addressed  
2 by the petition—

3 (i) at or below the cost per megawatt-  
4 hour of the technology used to generate  
5 the electricity sold by the petitioner in the  
6 previous calendar year; and

7 (ii) while enabling the petitioner to  
8 operate its system at an adequate level of  
9 reliability; and

10 (D) the number of megawatt-hours deter-  
11 mined under subparagraph (C) is less than the  
12 number of zero-emission electricity credits the  
13 petitioner would be required to submit under  
14 subsection (a).

15 (3) CREDIT SUBMISSION.—Notwithstanding  
16 subsection (a)(1), if the Administrator makes a de-  
17 termination of inadequate availability of technology  
18 for a petitioner for a calendar year, as described  
19 under this subsection, the petitioner shall not be re-  
20 quired to submit for such calendar year more than  
21 the number of zero-emission electricity credits equal  
22 to the number of megawatt-hours determined under  
23 paragraph (2)(C).

24 (4) CARBON MITIGATION AWARDS.—For the  
25 calendar year identified under paragraph (3), if the

1 Administrator makes one or more determinations of  
2 inadequate availability of technology under this sub-  
3 section, the Administrator shall award under section  
4 205(b) an amount of money equal to the sum of—

5 (A) the total amount paid by retail elec-  
6 tricity suppliers as alternative compliance pay-  
7 ments; and

8 (B) the total amount of the alternative  
9 compliance payments that would have been  
10 made by the petitioner or petitioners but for the  
11 determination of inadequate availability of tech-  
12 nology made under paragraph (2).

13 (e) EXEMPTIONS.—

14 (1) RECIPIENTS OF ACCELERATION INVEST-  
15 MENT CREDITS.—A qualified zero-emission elec-  
16 tricity taxpayer that receives a zero-emission elec-  
17 tricity acceleration investment credit for a calendar  
18 year under section 45V of the Internal Revenue  
19 Code of 1986, as added by section 301 of this Act,  
20 shall not be subject to the requirements to submit  
21 zero-emission electricity credits under this section  
22 for such calendar year and each calendar year there-  
23 after.

24 (2) RECIPIENTS OF ACCELERATION GRANTS.—

25 An eligible electricity provider that is awarded a

1 grant under section 302(a)(1) of this Act for a cal-  
2 endar year shall not be subject to the requirements  
3 to submit zero-emission electricity credits under this  
4 section for such calendar year and each calendar  
5 year thereafter, as long as the condition described  
6 under section 302(a)(1)(A) continues to be met.

7 **SEC. 203. ZERO-EMISSION ELECTRICITY CREDIT TRADING**  
8 **PROGRAM.**

9 (a) ESTABLISHMENT.—Not later than 1 year after  
10 the date of enactment of this Act, the Administrator shall  
11 establish a zero-emission electricity credit trading program  
12 under which—

13 (1) the Administrator shall record, track, auc-  
14 tion, and transfer zero-emission electricity credits;  
15 and

16 (2) a generator to whom such zero-emission  
17 electricity credits are issued may sell or otherwise  
18 transfer those credits, as provided or allowed by ap-  
19 plicable contracts, through—

20 (A) any auction established under the zero-  
21 emission electricity credit trading program;

22 (B) direct sales; or

23 (C) other transactional arrangements that  
24 sell electric energy or generating capacity either  
25 separately or combined with the transfer of

1 zero-emission electricity credits, including trans-  
2 actions that pair zero-emission electricity cred-  
3 its with the demand of the retail electricity sup-  
4 plier.

5 (b) ADMINISTRATION.—In carrying out the program  
6 under this section, the Administrator shall ensure that a  
7 zero-emission electricity credit may be—

8 (1) submitted only once under section 202(a);  
9 and

10 (2) only purchased by, transferred to, or other-  
11 wise secured by a retail electricity supplier.

12 (c) DELEGATION OF MARKET FUNCTION.—

13 (1) IN GENERAL.—In carrying out the program  
14 under this section, the Administrator may delegate,  
15 to one or more appropriate entities—

16 (A) the administration of a transparent  
17 national market for the sale or trade of zero-  
18 emission electricity credits; and

19 (B) the tracking of dispatch of zero-emis-  
20 sion electricity generation.

21 (2) ADMINISTRATION.—In making a delegation  
22 under paragraph (1), the Administrator shall ensure  
23 that the tracking and reporting of information con-  
24 cerning zero-emission electricity generation is trans-

1 parent, verifiable, and independent of any entities  
2 subject to an obligation under this title.

3 (d) BANKING OF ZERO-EMISSION ELECTRICITY  
4 CREDITS.—A zero-emission electricity credit may be used  
5 for compliance with the requirements of section 202 for—

6 (1) the calendar year for which the zero-emis-  
7 sion electricity credit is issued (in this subsection re-  
8 ferred to as “the applicable calendar year”); and

9 (2)(A) any of the 5 calendar years following the  
10 applicable calendar year, if the Administrator deter-  
11 mines under section 202(a)(4) that the average an-  
12 nual price of a zero-emission electricity credit is  
13 equal to or less than the breakthrough credit price  
14 for each of the 3 calendar years prior to the applica-  
15 ble calendar year; or

16 (B) if the Administrator has not made the de-  
17 termination under subparagraph (A)—

18 (i) any of the 5 calendar years following  
19 the applicable calendar year, if the applicable  
20 calendar year is any of calendar years 2023  
21 through 2029;

22 (ii) any of the 4 calendar years following  
23 the applicable calendar year, if the applicable  
24 calendar year is any of calendar years 2030  
25 through 2034;

1 (iii) any of the 3 calendar years following  
2 the applicable calendar year, if the applicable  
3 calendar year is any of calendar years 2035  
4 through 2039; and

5 (iv) any of the 2 calendar years following  
6 the applicable calendar year, if the applicable  
7 calendar year is 2040 or any calendar year  
8 thereafter.

9 **SEC. 204. DETERMINATION AND ISSUANCE OF QUANTITY**  
10 **OF ZERO-EMISSION ELECTRICITY CREDITS.**

11 (a) **ISSUANCE OF ZERO-EMISSION ELECTRICITY**  
12 **CREDITS.**—The Administrator shall issue to each gener-  
13 ator a quantity of zero-emission electricity credits deter-  
14 mined in accordance with this section not later than  
15 March 1 of the calendar year after the calendar year for  
16 which the zero-emission electricity credits are issued.

17 (b) **GENERAL RULES ON CREDIT ISSUANCE.**—Except  
18 as otherwise provided in this section, the Administrator  
19 shall issue to a generator generating zero-emission elec-  
20 tricity during a calendar year a quantity of zero-emission  
21 electricity credits for such generation that is equal to the  
22 amount of zero-emission electricity of the generator for the  
23 calendar year.

24 (c) **GENERAL RULES ON DETERMINING CARBON IN-**  
25 **TENSITY.**—The Administrator shall determine the carbon

1 intensity of each generating unit of a generator. Such de-  
2 termination shall be made—

3 (1) using data and methods from the Air Emis-  
4 sion Measurement Center of the Environmental Pro-  
5 tection Agency for emission testing and monitoring,  
6 including—

7 (A) continuous emission monitoring sys-  
8 tems; and

9 (B) predictive emission monitoring sys-  
10 tems; and

11 (2) with respect to a determination of the car-  
12 bon intensity of any generating unit using qualified  
13 renewable biomass or qualified low-carbon fuel, or  
14 generating qualified waste-to-energy, in consultation  
15 with—

16 (A) the Secretary of Agriculture; and

17 (B) the Secretary of the Interior.

18 (d) CARBON INTENSITY FOR CERTAIN CATEGORIES  
19 OF GENERATING UNITS.—

20 (1) GENERATING UNITS UTILIZING TECH-  
21 NOLOGIES WITHOUT DIRECT EMISSIONS.—The Ad-  
22 ministrators shall assign a carbon intensity of zero  
23 for any generating unit of a generator that does not  
24 produce direct emissions of any greenhouse gas in  
25 generating electric energy, including any generating

1 unit that generates electric energy only through the  
2 use of solar, wind, ocean, current, wave, tidal, geo-  
3 thermal, nuclear energy, or hydropower technology,  
4 except as provided under paragraphs (2) and (3).

5 (2) GENERATING UNITS UTILIZING TECH-  
6 NOLOGIES UTILIZING FOSSIL FUELS.—

7 (A) ACCOUNTING FOR UPSTREAM GREEN-  
8 HOUSE GAS EMISSIONS.—In determining the  
9 carbon intensity of each generating unit using  
10 coal, natural gas, or oil, the Administrator shall  
11 account for—

12 (i) the direct emissions of any green-  
13 house gas of the generating unit, which  
14 shall not include the qualified carbon oxide  
15 that is captured and safely and perma-  
16 nently stored or utilized; and

17 (ii)(I) the average amounts of carbon  
18 dioxide and methane emissions, in terms of  
19 carbon dioxide equivalent, that occur dur-  
20 ing extraction, flaring, processing, trans-  
21 mission, and transportation of coal, nat-  
22 ural gas, or oil that is utilized for the gen-  
23 eration of electricity in the United States;  
24 or



1 (II) with respect to a generator that  
2 the Administrator determines under sub-  
3 paragraph (B) has demonstrated that the  
4 coal, natural gas, or oil consumed by such  
5 generator is associated with the release of  
6 smaller amounts of carbon dioxide and  
7 methane emissions than the amounts de-  
8 scribed in subclause (I), such smaller  
9 amounts.

10 (B) DETERMINATION.—

11 (i) BEST AVAILABLE SCIENCE.—In  
12 making a determination under this para-  
13 graph, the Administrator shall utilize the  
14 best available science, including with re-  
15 spect to the measurement of low-frequency  
16 high-emission events, including by using  
17 data from the detection of natural gas flar-  
18 ing from the satellite observations of the  
19 National Oceanic and Atmospheric Admin-  
20 istration.

21 (ii) ACCOUNTING FOR UPSTREAM  
22 METHANE WASTE PREVENTION.—The Ad-  
23 ministrator may determine that a gener-  
24 ator has demonstrated that the fossil fuel  
25 consumed by such generator is associated

1 with the release of smaller amounts of car-  
2 bon dioxide and methane emissions than  
3 the amounts described in subparagraph  
4 (A)(ii)(I) if the generator—

5 (I) submits a petition for such  
6 determination to the Administrator by  
7 January 31 after the calendar year  
8 for which such determination is  
9 sought;

10 (II) accounts in the petition for  
11 low-frequency, high-emission events;  
12 and

13 (III) uses in the petition direct  
14 measurements of the applicable facili-  
15 ties, which may include measurements  
16 made in the course of participation in  
17 a voluntary program or public disclo-  
18 sure of the quantified methane emis-  
19 sion intensity of the applicable facili-  
20 ties.

21 (iii) PUBLIC AVAILABILITY.—The in-  
22 formation provided to the Administrator by  
23 a generator to make a determination under  
24 this subparagraph shall be available to the  
25 public upon such determination.

1 (C) DEFINITION.—In this paragraph, the  
2 term “qualified carbon oxide” has the meaning  
3 given the term in section 45Q of the Internal  
4 Revenue Code of 1986.

5 (D) STANDARDS.—The Administrator shall  
6 promulgate the standards for measurement nec-  
7 essary to implement this paragraph not later  
8 than 2 years after the date of enactment of this  
9 Act, and shall update such standards every 5  
10 years thereafter, based on the best available  
11 science and technology.

12 (3) HYDROPOWER UTILIZING A NEW RES-  
13 ERVOIR.—In determining the carbon intensity of  
14 each generating unit using hydropower associated  
15 with a reservoir constructed after the date of enact-  
16 ment of this Act, the Administrator shall account for  
17 the greenhouse gas emissions that can be attributed  
18 to the hydropower facility, including the applicable  
19 new reservoir.

20 (e) QUANTITY OF CREDITS ISSUED FOR CERTAIN  
21 CATEGORIES OF GENERATING UNITS.—

22 (1) QUALIFIED COMBINED HEAT AND POWER  
23 SYSTEMS.—

24 (A) IN GENERAL.—The Administrator  
25 shall issue to a generator generating zero-emis-

1           sion electricity during a calendar year using a  
2           generating unit that is a qualified combined  
3           heat and power system a quantity of zero-emis-  
4           sion electricity credits for such generation that  
5           is equal to—

6                   (i) the number that represents the  
7                   amount of zero-emission electricity gen-  
8                   erated by such generating unit during such  
9                   calendar year; less

10                   (ii) the product obtained by multi-  
11                   plying—

12                           (I) the number of megawatt-  
13                           hours of electric energy generated by  
14                           the qualified combined heat and power  
15                           system that are consumed onsite dur-  
16                           ing such calendar year; by

17                           (II) the average of the minimum  
18                           percentage of zero-emission electricity  
19                           (as defined in section 202(a)(5)) for  
20                           the calendar year for retail electricity  
21                           suppliers in the region of the gener-  
22                           ator, as determined by the Adminis-  
23                           trator.

24                   (B) ADDITIONAL CREDITS.—In addition to  
25                   zero-emission electricity credits issued under

1           subparagraph (A), the Administrator shall issue  
2           to a generator described in subparagraph (A)  
3           zero-emission electricity credits for greenhouse  
4           gas emissions avoided as a result of the use of  
5           the applicable qualified combined heat and  
6           power system, rather than a separate thermal  
7           source, to meet the thermal needs of the gener-  
8           ator or one or more additional entities.

9           (C) APPLICABILITY.—This paragraph shall  
10          not apply with respect to a qualified combined  
11          heat and power system using qualified renew-  
12          able biomass.

13          (2) QUALIFIED RENEWABLE BIOMASS.—The  
14          Administrator shall issue to a generator generating  
15          zero-emission electricity during a calendar year  
16          using qualified renewable biomass a quantity of  
17          zero-emission electricity credits for such generation  
18          that is equal to the product obtained by multi-  
19          plying—

20                 (A) the qualified electricity generation of  
21                 the generator that was generated using quali-  
22                 fied renewable biomass during such calendar  
23                 year; by

1 (B) the average carbon intensity of the  
2 generating units of the generator that use  
3 qualified renewable biomass.

4 (3) QUALIFIED WASTE-TO-ENERGY.—

5 (A) IN GENERAL.—Except as provided in  
6 subparagraph (B), the Administrator shall issue  
7 to a generator generating zero-emission elec-  
8 tricity during a calendar year that is qualified  
9 waste-to-energy a quantity of zero-emission  
10 electricity credits for such generation that is  
11 equal to the product obtained by multiplying—

12 (i) the qualified waste-to-energy of the  
13 generator that is qualified electricity gen-  
14 eration during such calendar year; by

15 (ii) the average carbon intensity of the  
16 generating units of the generator used to  
17 generate qualified waste-to-energy.

18 (B) EXCEPTION.—Zero-emission electricity  
19 credits for zero-emission electricity that is  
20 qualified waste-to-energy generated using quali-  
21 fied renewable biomass shall be issued in ac-  
22 cordance with paragraph (2).

23 (4) QUALIFIED LOW-CARBON FUELS.—

24 (A) IN GENERAL.—Except as provided in  
25 subparagraph (C), the Administrator shall issue

1 to a generator generating zero-emission elec-  
2 tricity during a calendar year using qualified  
3 low-carbon fuels a quantity of zero-emission  
4 electricity credits for such generation that is  
5 equal to the product obtained by multiplying—

6 (i) the qualified electricity generation  
7 of the generator that was generated using  
8 qualified low-carbon fuels during such cal-  
9 endar year; by

10 (ii) the average carbon intensity of the  
11 generating units of the generator that use  
12 qualified low-carbon fuels.

13 (B) ADJUSTMENT FOR PRODUCTION.—In  
14 determining the carbon intensity of each gener-  
15 ating unit using a qualified low-carbon fuel, the  
16 Administrator shall account for the greenhouse  
17 gas emissions associated with the production of  
18 such qualified low-carbon fuel.

19 (C) NO DOUBLE COUNTING.—The Admin-  
20 istrator shall not issue zero-emission electricity  
21 credits for electric energy generated using a  
22 qualified low-carbon fuel that is generated using  
23 electric energy for which a generator is issued  
24 a zero-emission electricity credit under this  
25 title.

1           (5) DIRECT AIR CAPTURE OF CARBON DIOX-  
2 IDE.—The Administrator shall issue to an entity  
3 that captures carbon dioxide from the atmosphere,  
4 and safely and permanently stores or utilizes such  
5 carbon dioxide, 1 zero-emission electricity credit for  
6 every 0.82 metric tons of carbon dioxide equivalent  
7 that is captured and safely and permanently stored  
8 or utilized.

9           (6) SPECIAL RULES.—

10           (A) REGULATIONS.—Subject to subpara-  
11 graph (B), not later than 1 year after the date  
12 of enactment of this Act, for purposes of  
13 issuing zero-emission electricity credits under  
14 this section, the Administrator shall promulgate  
15 regulations establishing—

16           (i) the conditions under which carbon  
17 dioxide may be safely and permanently  
18 stored;

19           (ii) the methods and processes by  
20 which carbon dioxide may be utilized in a  
21 manner that ensures the removal of the  
22 carbon dioxide safely and permanently  
23 from the atmosphere, including utilization  
24 in the production of substances, such as  
25 plastics and chemicals; and



1 (iii) requirements to account for the  
2 risk that some fraction of the carbon diox-  
3 ide intended to be permanently stored or  
4 utilized may nevertheless be emitted into  
5 the atmosphere.

6 (B) EXISTING REQUIREMENTS.—In pro-  
7 mulgating regulations pursuant to this para-  
8 graph, the Administrator shall incorporate any  
9 existing requirements for the permanent geo-  
10 logic storage of carbon dioxide, including any  
11 requirements promulgated under section 45Q of  
12 the Internal Revenue Code of 1986.

13 (f) MAXIMUM QUANTITY OF CREDITS.—Except as  
14 provided under subsection (e)(1), the total quantity of  
15 zero-emission electricity credits issued under this section  
16 to a generator for a calendar year shall not exceed the  
17 number of megawatt-hours of the qualified electricity gen-  
18 eration of the generator for the calendar year.

19 (g) NO NEGATIVE CREDITS.—Notwithstanding any  
20 other provision of this title, the Administrator shall not  
21 issue a negative quantity of zero-emission electricity cred-  
22 its to any generator.

23 (h) FACILITIES OUTSIDE THE UNITED STATES.—  
24 With respect to electricity generated by a facility or gener-  
25 ating unit that is located outside of the United States,

1 a zero-emission electricity credit may be issued only with  
2 respect to electricity that is sold for resale in the United  
3 States.

4 (i) CONTRACTS.—A zero-emission electricity credit  
5 issued for electricity that is—

6 (1) sold for resale under a contract in effect on  
7 the date of enactment of this title shall be issued to  
8 the purchasing retail electricity supplier in propor-  
9 tion to the zero-emission electricity purchased by  
10 such retail electricity supplier under the contract,  
11 unless otherwise provided by the contract; and

12 (2) sold for resale under a contract in which a  
13 generating unit is not specified, shall be issued to  
14 the purchasing retail electricity supplier in propor-  
15 tion to the ratio of zero-emission electricity genera-  
16 tion from the generator making such sale for resale.

17 (j) FEDERAL POWER MARKETING ADMINISTRA-  
18 TION.—A zero-emission electricity credit issued for elec-  
19 tricity that is generated by a Federal Power Marketing  
20 Administration shall be transferred to the retail electricity  
21 supplier that is purchasing the electricity.

22 (k) RECIPIENTS OF ACCELERATION INVESTMENT  
23 CREDITS.—A qualified zero-emission electricity taxpayer  
24 that receives a zero-emission electricity acceleration invest-  
25 ment credit for a calendar year under section 45V of the

1 Internal Revenue Code of 1986, as added by section 301  
2 of this Act, shall not be issued any zero-emission elec-  
3 tricity credits under this section for such calendar year  
4 or any calendar year thereafter.

5 (l) RECIPIENTS OF ACCELERATION GRANTS.—An eli-  
6 gible electricity provider that receives a grant during a cal-  
7 endar year under section 302(a)(1) of this Act shall not  
8 be issued any zero-emission electricity credits under this  
9 section for such calendar year or any calendar year there-  
10 after.

11 **SEC. 205. CARBON MITIGATION FUND.**

12 (a) CARBON MITIGATION FUND.—

13 (1) CREATION OF FUND.—There is hereby es-  
14 tablished a trust fund, to be known as the “Carbon  
15 Mitigation Fund”, consisting of such amounts as  
16 may be appropriated to such fund as provided in  
17 this section.

18 (2) ADMINISTRATION.—The Carbon Mitigation  
19 Fund shall be administered by the Administrator.

20 (3) TRANSFERS TO TRUST FUND.—There are  
21 hereby appropriated to the Carbon Mitigation Fund  
22 each year amounts equal to the sum of the amounts  
23 that are—

24 (A) attributable to alternative compliance  
25 payments made pursuant to section 202;

1 (B) equal to the alternative compliance  
2 payments that would have been made by any  
3 petitioners under section 202 but for a deter-  
4 mination of inadequate availability of tech-  
5 nology made by the Administrator under section  
6 202(d); and

7 (C) collected as a civil penalty under sec-  
8 tion 209.

9 (4) EXPENDITURES.—Amounts in the Carbon  
10 Mitigation Fund shall be available without further  
11 appropriation or fiscal year limitation to carry out  
12 the program under subsection (b).

13 (b) PROGRAM.—

14 (1) IN GENERAL.—The Administrator shall  
15 carry out a program to award funds to entities to  
16 carry out activities in States that avoid emissions of  
17 greenhouse gases or remove carbon dioxide from the  
18 atmosphere.

19 (2) ACTIVITIES.—Activities for which the Ad-  
20 ministrator may award funds under the program  
21 carried out pursuant to this subsection include—

22 (A) improvements to the energy efficiency  
23 of existing facilities and devices;

24 (B) improvements to the electrical grid;

1 (C) the replacement of natural gas space  
2 heaters, natural gas water heaters, and natural  
3 gas stoves, with electric appliances;

4 (D) the replacement of fossil fuel-powered  
5 vehicles owned by State and local agencies with  
6 electric vehicles or other low-carbon fuel vehi-  
7 cles;

8 (E) the replacement of fossil fuel-powered  
9 ground airport and seaport vehicles with electric  
10 vehicles or other low-carbon fuel vehicles;

11 (F) installation of fast charging stations  
12 for electric vehicles along highways and other  
13 public roads in urban areas and rural areas;

14 (G) beneficial electrification-related reduc-  
15 tions not otherwise identified in this paragraph;

16 (H) activities that capture carbon dioxide  
17 from the atmosphere and safely and perma-  
18 nently store or utilize such carbon dioxide in ac-  
19 cordance with section 204(e)(6); and

20 (I) any activity that is endorsed by a gen-  
21 erator or a retail electricity supplier that results  
22 in a net reduction of emissions of greenhouse  
23 gases.

24 (3) EXCLUSIONS.—The Administrator may not  
25 award funds to an entity under the program carried

1 out pursuant to this subsection for any activity for  
2 which the entity—

3 (A) has been issued a zero-emission elec-  
4 tricity credit; or

5 (B) received a deduction of megawatt-  
6 hours under section 202(a)(3)(B) to account for  
7 beneficial electrification-related reductions.

8 (4) CRITERIA.—The Administrator may only  
9 award funds under the program carried out pursu-  
10 ant to this subsection for an activity for which the  
11 Administrator determines that—

12 (A) the amount of carbon dioxide emis-  
13 sions avoided or removed from the atmosphere  
14 by the activity will be adequately confirmed  
15 through monitoring, reporting, and verification;

16 (B) the risk that some amount of the car-  
17 bon dioxide that is removed from the atmos-  
18 phere by the activity may reenter the atmos-  
19 phere at a later date is adequately reflected  
20 through a discounting of the amount described  
21 in paragraph (5)(C)(ii);

22 (C) the risk that some amount of the  
23 greenhouse gases, the emission of which is  
24 avoided by the activity, may enter the atmos-  
25 phere at a later date is adequately reflected

1 through a discounting of the amount described  
2 in paragraph (5)(C)(i);

3 (D) the risk that the activity may directly  
4 or indirectly increase the release of greenhouse  
5 gases from another location has been ade-  
6 quately addressed;

7 (E) the activity is not required, or being  
8 fully supported financially by, a Federal, State,  
9 or local law, program, or activity; and

10 (F) if the activity involves land use, the ac-  
11 tivity—

12 (i) aligns with the Sustainable Devel-  
13 opment Goals of the United Nations, in-  
14 cluding being consistent with the conserva-  
15 tion of biological diversity and natural eco-  
16 systems (including forests and grasslands);  
17 and

18 (ii) maintains ecosystem services and  
19 other social and environmental benefits.

20 (5) PROPOSALS.—In order to qualify for an  
21 award of funds under this subsection, an entity shall  
22 submit to the Administrator a proposal that—

23 (A) describes the activity to be carried out  
24 with the award of funds;

1 (B) identifies the amount of money for  
2 which the entity is applying;

3 (C) identifies the amount, to be measured  
4 in one-year increments, of—

5 (i) greenhouse gas emissions to be  
6 avoided by the activity, measured in terms  
7 of carbon dioxide equivalent; and

8 (ii) carbon dioxide to be removed from  
9 the atmosphere by the activity, measured  
10 in metric tons;

11 (D) identifies the bid amount, expressed as  
12 dollars per metric ton, which shall be the  
13 quotient obtained by dividing the amount iden-  
14 tified under subparagraph (B) by the total  
15 amount identified under subparagraph (C);

16 (E) provides any information required by  
17 the Administrator in order to make a deter-  
18 mination described in paragraph (4); and

19 (F) provides any other certifications the  
20 Administrator determines appropriate.

21 (6) DEADLINES.—

22 (A) PROMULGATION.—Not later than Jan-  
23 uary 1, 2024, the Administrator shall promul-  
24 gate regulations to implement this section, in-



1 including specifying the information required to  
2 be included in proposals under paragraph (5).

3 (B) SOLICITATION.—Not later than Feb-  
4 ruary 1, 2024, and each February 1 thereafter,  
5 the Administrator shall solicit proposals for ac-  
6 tivities described in paragraph (1) for which the  
7 Administrator may award funds under the pro-  
8 gram carried out pursuant to this subsection.

9 (C) IDENTIFICATION.—Not later than  
10 June 1, 2024, and each June 1 thereafter, the  
11 Administrator shall identify proposals that have  
12 been submitted by March 1 of such calendar  
13 year for activities described in paragraph (1)  
14 that qualify for an award of funds under the  
15 program carried out pursuant to this sub-  
16 section.

17 (D) AWARD OF FUNDS.—Not later than  
18 August 1, 2024, and each August 1 thereafter,  
19 the Administrator shall award to entities funds  
20 available in the Carbon Mitigation Fund estab-  
21 lished by subsection (a) for activities described  
22 in proposals identified under subparagraph (C).

23 (7) AWARDS TO MOST COST-EFFECTIVE ACTIVI-  
24 TIES.—The Administrator shall award funds to enti-

1 ties for activities described in proposals identified  
2 under paragraph (6)(C)—

3 (A) beginning by awarding funds to the  
4 entity submitting such a proposal with the low-  
5 est bid amount identified pursuant to para-  
6 graph (5)(D); and

7 (B) then awarding funds to entities se-  
8 quentially by entity submitting such a proposal  
9 with the next lowest bid amount so identified  
10 until all funds are awarded.

11 (c) CONSULTATION.—The Administrator shall con-  
12 sult with the Secretary of the Interior and the Secretary  
13 of Agriculture in promulgating regulations to measure,  
14 monitor, and verify any natural sequestration activities  
15 awarded under this section.

16 **SEC. 206. STATE PROGRAMS.**

17 (a) SAVINGS PROVISION.—

18 (1) IN GENERAL.—Except as provided in para-  
19 graph (2) and subject to subsection (b), nothing in  
20 this title affects the authority of a State or a polit-  
21 ical subdivision of a State to adopt or enforce any  
22 law or regulation relating to—

23 (A) clean energy or renewable energy;

24 (B) the regulation of a retail electricity  
25 supplier; or

1 (C) greenhouse gas emissions reduction.

2 (2) FEDERAL LAW.—Except as otherwise pro-  
3 vided in this section, no law or regulation of a State  
4 or a political subdivision of a State may relieve a re-  
5 tail electricity supplier from compliance with an ap-  
6 plicable requirement of this title.

7 (b) COORDINATION.—The Administrator, in con-  
8 sultation with States that have State clean energy pro-  
9 grams in effect, shall facilitate, to the maximum extent  
10 practicable, coordination between the implementation of  
11 this title and the relevant State clean energy program.

12 (c) QUALIFIED STATES.—

13 (1) DETERMINATION.—

14 (A) IN GENERAL.—The Administrator, in  
15 consultation with States that have State clean  
16 energy programs in effect, shall determine  
17 whether each such State is a qualified State.

18 (B) DEADLINES.—The Administrator shall  
19 make a determination under subparagraph  
20 (A)—

21 (i) not later than January 1, 2022,  
22 with respect to a State that has a State  
23 clean energy program in effect on the date  
24 of enactment of this Act, and every 5 years  
25 thereafter; and

1                   (ii) not later than 6 months after the  
2                   date of the enactment by a State, after the  
3                   date of enactment of this Act, of a new or  
4                   modified existing State clean energy pro-  
5                   gram, and every 5 years thereafter.

6                   (C) PERIOD.—A determination under this  
7                   paragraph shall be effective until the earlier  
8                   of—

9                   (i) the date that is 5 years after the  
10                  date of the determination; or

11                  (ii) the date on which the Adminis-  
12                  trator makes a subsequent determination  
13                  under this paragraph with respect to the  
14                  applicable State.

15                  (2) COMPLIANCE.—If the Administrator deter-  
16                  mines, under paragraph (1), that a State is a quali-  
17                  fied State, a retail electricity supplier that is subject  
18                  to and in compliance with the State clean energy  
19                  program of such qualified State shall be deemed to  
20                  be in compliance with the requirements of this title  
21                  for the period during which the determination is ef-  
22                  fective.

23                  (3) PROHIBITION AGAINST DOUBLE COUNT-  
24                  ING.—The Administrator, in consultation with  
25                  States, shall develop a protocol to ensure that a

1 zero-emission electricity credit may not be issued  
2 under this title with respect to an amount of electric  
3 energy for which one or more State clean energy  
4 credits are issued under, and used for compliance  
5 with, a State clean energy program in a qualified  
6 State.

7 (d) QUALIFIED ELECTRICITY GENERATION ELIGI-  
8 BLE IN BOTH STATE AND FEDERAL PROGRAMS.—

9 (1) ISSUANCE OF CREDIT.—In a State that is  
10 not a qualified State, 1 megawatt-hour of zero-emis-  
11 sion electricity is eligible to be issued both a State  
12 clean energy credit and a zero-emission electricity  
13 credit pursuant to this title.

14 (2) RETIREMENT OF STATE CREDITS.—Retire-  
15 ment of a State clean energy credit for compliance  
16 with a State law in a State that is not a qualified  
17 State shall not prevent a retail electricity supplier  
18 from submitting a zero-emission electricity credit  
19 issued for the same megawatt-hour of zero-emission  
20 electricity for compliance with this title.

21 (3) SUBMISSION OF FEDERAL CREDITS.—Sub-  
22 mission of a zero-emission electricity credit for com-  
23 pliance with this title shall not prevent a retail elec-  
24 tricity supplier from retiring a State clean energy  
25 credit issued for the same megawatt-hour of quali-

1       fied electricity generation for compliance with a  
2       State law.

3       (e) DEFINITIONS.—In this section:

4           (1) QUALIFIED STATE.—The term “qualified  
5       State” means a State—

6           (A) that has a State clean energy program;

7           and

8           (B) in which the retail electricity suppliers  
9       in the State, in the aggregate, sell—

10           (i) a quantity of zero-emission elec-  
11       tricity that is greater than the quantity of  
12       zero-emission electricity represented by the  
13       zero-emission electricity credits the retail  
14       electricity suppliers, in the aggregate,  
15       would otherwise be required to submit  
16       under section 202; or

17           (ii) of the total amount of electric en-  
18       ergy sold in the State, a percentage of  
19       zero-emission electricity that is greater  
20       than the average minimum percentage of  
21       zero-emission electricity required for all re-  
22       tail electricity suppliers under section 202.

23           (2) STATE CLEAN ENERGY CREDIT.—The term  
24       “State clean energy credit” means a certificate cor-  
25       responding to the electricity generated from renew-

1       able or other zero-emission electricity sources that is  
2       issued under a law enacted by a State.

3           (3) STATE CLEAN ENERGY PROGRAM.—The  
4       term “State clean energy program” means one or  
5       more State requirements, including laws and regula-  
6       tions—

7           (A) under which retail electricity suppliers  
8       in the State are required to sell—

9           (i) a quantity of zero-emission elec-  
10       tricity; or

11          (ii) of the total amount of electric en-  
12       ergy sold in the State, a percentage of  
13       zero-emission electricity; and

14          (B) for which there are compliance mecha-  
15       nisms, including the imposition of penalties,  
16       that are at least as effective in enforcing com-  
17       pliance with such requirements as the system of  
18       enforcement under this title.

19   **SEC. 207. REPORT TO CONGRESS.**

20       Not later than January 1, 2035, the Administrator  
21       shall submit to Congress a report with an evaluation and  
22       a forecast of the remaining barriers to achieving genera-  
23       tion of electric energy with no emissions of greenhouse  
24       gases.

1 **SEC. 208. INFORMATION COLLECTION.**

2       The Administrator may require any retail electricity  
3 supplier, generator, or other entity that the Administrator  
4 determines appropriate, to submit to the Administrator  
5 any information the Administrator determines to be ap-  
6 propriate to carry out this title.

7 **SEC. 209. CIVIL PENALTIES.**

8       (a) IN GENERAL.—Subject to subsection (b)—

9           (1) a retail electricity supplier that fails to meet  
10 the requirements of section 202 shall be subject to  
11 a civil penalty in an amount equal to the product ob-  
12 tained by multiplying—

13               (A) the aggregate quantity of zero-emis-  
14 sion electricity credits that the retail electricity  
15 supplier failed to submit for the calendar year  
16 to comply with section 202; by

17               (B) 300 percent of the amount of alter-  
18 native compliance payment for the calendar  
19 year, as determined under section 202(a)(6);  
20 and

21           (2) an entity required to submit information  
22 pursuant to section 208 that violates such section by  
23 failing to submit the information, or submitting false  
24 or misleading information, shall be subject to a civil  
25 penalty of \$25,000 for each day during which such  
26 violation continues.



1 (b) WAIVERS AND MITIGATION.—

2 (1) FORCE MAJEURE.—The Administrator may  
3 mitigate or waive a civil penalty under subsection (a)  
4 if the applicable retail electricity supplier or other  
5 entity was unable to comply with an applicable re-  
6 quirement for reasons outside of the reasonable con-  
7 trol of the retail electricity supplier or other entity.

8 (2) REDUCTION FOR STATE PENALTIES.—The  
9 Administrator shall reduce the amount of a penalty  
10 determined under subsection (a) by the amount paid  
11 by the applicable retail electricity supplier to a State  
12 for failure to comply with the requirement of a State  
13 renewable energy program, if the Administrator de-  
14 termines that the State requirement is more strin-  
15 gent than the applicable requirement of this title.

16 **SEC. 210. REGULATIONS.**

17 (a) DEADLINE.—Except as otherwise provided in this  
18 title, not later than 2 years after the date of enactment  
19 of this title, the Administrator shall promulgate regula-  
20 tions to implement this title.

21 (b) CONSULTATION.—The Administrator shall con-  
22 sult with the Secretary of Energy in promulgating regula-  
23 tions under this title.

## 1     **Subtitle B—Methane Regulation**

### 2     **SEC. 211. METHANE REGULATION.**

3           (a) NATIONAL GOAL.—The goal of this section is to  
4 reduce steadily the quantity of United States methane  
5 emissions from the oil and natural gas sector such that  
6 the quantity of methane emissions in calendar year 2030  
7 from the oil and natural gas sector is at least 90 percent  
8 below the quantity of methane emissions in calendar year  
9 2012 from such sector.

10          (b) EXISTING AUTHORITY.—Using existing authority  
11 of the Environmental Protection Agency, the Adminis-  
12 trator shall issue regulations pursuant to section 111 of  
13 the Clean Air Act (42 U.S.C. 7411) to control methane  
14 emissions from the oil and natural gas sector to achieve  
15 the national goal established in subsection (a).

16          (c) COVERED SOURCES.—The regulations promul-  
17 gated pursuant to this section shall apply to sources of  
18 methane from every segment of oil and natural gas sys-  
19 tems, including oil and natural gas production, processing,  
20 transmission, distribution, and storage.

21          (d) REGULATIONS TO MEET THE NATIONAL  
22 GOAL.—

23               (1) DEADLINE.—Not later than December 31,  
24 2023, the Administrator shall promulgate final regu-  
25 lations under section 111 of the Clean Air Act (42

1 U.S.C. 7411) to achieve the national goal established  
2 in subsection (a).

3 (2) CONTENTS.—The regulations required by  
4 paragraph (1) shall provide for the establishment,  
5 implementation, and enforcement of standards of  
6 performance for new sources and existing sources,  
7 and guidelines for States, that include requirements  
8 for—

9 (A) new and existing natural gas trans-  
10 mission and distribution pipelines to reduce  
11 methane emissions by application of the best  
12 system of venting and leakage reduction;

13 (B) new sources, and existing sources, with  
14 equipment that handles liquefied natural gas to  
15 reduce methane emissions from that equipment  
16 by application of the best system of emission re-  
17 duction; and

18 (C) new and existing offshore petroleum  
19 and natural gas production facilities to reduce  
20 methane emissions by application of the best  
21 system of emission reduction.

22 (e) DEFINITIONS.—In this section:

23 (1) ADMINISTRATOR.—The term “Adminis-  
24 trator” means the Administrator of the Environ-  
25 mental Protection Agency.

1 (2) EXISTING SOURCE; NEW SOURCE; STAND-  
 2 ARD OF PERFORMANCE.—The terms “existing  
 3 source”, “new source”, and “standard of perform-  
 4 ance”, have the meaning given such terms in section  
 5 111(a) of the Clean Air Act (42 U.S.C. 7411(a)).

6 **TITLE III—INCENTIVES FOR THE**  
 7 **ACCELERATED DEPLOYMENT**  
 8 **OF ZERO-EMISSION ELEC-**  
 9 **TRICITY**

10 **SEC. 300. PURPOSE.**

11 The purpose of this title is to provide support for any  
 12 given power company to accelerate the deployment of an  
 13 80-percent zero-emission electricity generation system as  
 14 early as possible before 2030 and a 100-percent zero-emis-  
 15 sion electricity generation system as early as possible be-  
 16 fore 2035.

17 **Subtitle A—Incentives for the Ac-**  
 18 **celerated Deployment of 80-Per-**  
 19 **cent and 100-Percent Zero-Emis-**  
 20 **sion Electricity Systems**

21 **SEC. 301. ZERO-EMISSION ELECTRICITY ACCELERATION IN-**  
 22 **VESTMENT TAX CREDIT.**

23 (a) IN GENERAL.—Subpart E of part IV of sub-  
 24 chapter A of chapter 1 of the Internal Revenue Code of

1 1986 is amended by inserting after section 48C the fol-  
2 lowing new section:

3 **“SEC. 48D. ZERO-EMISSION ELECTRICITY ACCELERATION**  
4 **INVESTMENT CREDIT.**

5 “(a) IN GENERAL.—For purposes of section 46, in  
6 the case of a taxpayer who is a qualified zero-emission  
7 electricity taxpayer, the zero-emission electricity accelera-  
8 tion investment credit shall be the applicable percentage  
9 of the cost of any qualified zero-emission electricity gener-  
10 ating unit.

11 “(b) APPLICABLE PERCENTAGE.—For purposes of  
12 this section—

13 “(1) IN GENERAL.—Except as provided in para-  
14 graph (2), with respect to qualified zero-emission  
15 electricity generating units placed in service after  
16 the date of the enactment of this section, the appli-  
17 cable percentage shall be determined under the fol-  
18 lowing table:

**“In the case of property placed in service in a tax- The applicable percentage shall  
able year beginning in: be:**

Any year before 2026 .....	50%
2026 .....	48%
2027 .....	46%
2028 .....	44%
2029 .....	42%
2030 .....	40%
2031 .....	38%
2032 .....	36%
2033 .....	34%
2034 .....	32%
2035 .....	30%
Any year thereafter .....	0%

1           “(2) SPECIAL RULE FOR TAXPAYERS ACHIEV-  
2           ING 80-PERCENT ZERO-EMISSION ELECTRICITY BE-  
3           FORE 2031.—In the case of a taxpayer who is a  
4           qualified zero-emission electricity taxpayer solely by  
5           reason of subsection (c)(3)(B), the applicable per-  
6           centage shall be—

7                   “(A) in the case of property placed in serv-  
8                   ice in a taxable year beginning before January  
9                   1, 2031, 7 percentage points less than the ap-  
10                  plicable percentage otherwise determined with  
11                  respect to such property for the taxable year  
12                  under paragraph (1), and

13                   “(B) in the case of property placed in serv-  
14                   ice in any taxable year beginning after Decem-  
15                   ber 31, 2030, zero.

16           “(c) DEFINITIONS.—For purposes of this section—

17                   “(1) QUALIFIED ZERO-EMISSION ELECTRICITY  
18                   GENERATING UNIT.—The term ‘qualified zero-emis-  
19                   sion electricity generating unit’ means a generating  
20                   unit—

21                   “(A) that is placed into service after the  
22                   date of enactment of this section, and

23                   “(B) the operation of which does not result  
24                   in the release of carbon dioxide into the atmos-  
25                   phere.

1           “(2) GENERATING UNIT.—The term ‘generating  
2           unit’ has the meaning given such term in section  
3           201 of the Clean Energy Innovation and Deploy-  
4           ment Act of 2021.

5           “(3) QUALIFIED ZERO-EMISSION ELECTRICITY  
6           TAXPAYER.—

7           “(A) IN GENERAL.—The term ‘qualified  
8           zero-emission electricity taxpayer’ means, for a  
9           taxable year, a taxpayer who—

10           “(i) does not own a generating unit  
11           that emits carbon dioxide at any point dur-  
12           ing such taxable year, and

13           “(ii) for such taxable year, owns non-  
14           emitting electricity generating units with a  
15           generating capacity that is equal to or  
16           greater than the annual average generating  
17           capacity of generating units owned by such  
18           taxpayer during the 5-year period ending  
19           on the date of the enactment of this sec-  
20           tion.

21           “(B) SPECIAL RULE FOR TAXPAYERS  
22           ACHIEVING 80-PERCENT ZERO-EMISSION ELEC-  
23           TRICITY.—In the case of a taxpayer not de-  
24           scribed in subparagraph (A) who for any tax-  
25           able year generates not less than 80 percent of

1 the electricity sold by such eligible electricity  
2 provider using generating units the operation of  
3 which does not result in the release of carbon  
4 dioxide into the atmosphere (taking into ac-  
5 count units placed in service during such tax-  
6 able year), such taxpayer shall be treated as a  
7 qualified zero-emission electricity taxpayer.

8 “(d) CREDIT LIMITED TO REPLACEMENT OF PAST  
9 ELECTRICITY GENERATING CAPACITY.—In the case of a  
10 taxpayer whose electricity generation capacity exceeds the  
11 annual average generating capacity of generating units  
12 owned by such taxpayer during the 5-year period ending  
13 on the date of the enactment of this section, there shall  
14 not be taken into account under subsection (a) the cost  
15 of any qualified zero-emission electricity generating unit  
16 (or a portion thereof) placed in service to the extent, under  
17 such rules as the Secretary may by regulation prescribe,  
18 such excess generation is allocable to such qualified zero-  
19 emission electricity generating unit (or a portion thereof).

20 “(e) TRANSFERABILITY.—

21 “(1) IN GENERAL.—If the qualified zero-emis-  
22 sion electricity taxpayer elects to transfer all (or any  
23 portion specified in the election) of the credit deter-  
24 mined under this section for any taxable year with  
25 respect to any qualified zero-emission electricity gen-



1 erating unit to an eligible project partner for a spec-  
2 ified period, then, the eligible project partner speci-  
3 fied in such election (and not the taxpayer) shall be  
4 treated for purposes of this title with respect to such  
5 credit (or such portion thereof) as the person pro-  
6 ducing and selling the electricity to which such cred-  
7 it (or portion thereof) relates.

8 “(2) DEDUCTION FOR PAYMENTS IN CONNEX-  
9 TION WITH TRANSFER.—There shall be allowed as a  
10 deduction under part VI of subchapter B an amount  
11 equal to the amount paid by a taxpayer as consider-  
12 ation for a transfer described in paragraph (1).

13 “(3) ELIGIBLE PROJECT PARTNER.—

14 “(A) For purposes of this subsection, the  
15 term ‘eligible project partner’ means, with re-  
16 spect to any qualified zero-emission electricity  
17 generating unit, any person who—

18 “(i) has an ownership interest in such  
19 qualified zero-emission electricity gener-  
20 ating unit,

21 “(ii) provided equipment for or serv-  
22 ices in the construction of such qualified  
23 zero-emission electricity generating unit,

1           “(iii) provides electric transmission or  
2           distribution services for such qualified  
3           zero-emission electricity generating unit,

4           “(iv) purchases electricity from such  
5           qualified zero-emission electricity gener-  
6           ating unit pursuant to a contract, or

7           “(v) provides financing for such quali-  
8           fied zero-emission electricity generating  
9           unit.

10          “(B) For purposes of subparagraph (A)(v),  
11          any amount paid as consideration for a transfer  
12          described in paragraph (1) shall not be treated  
13          as financing of a qualified zero-emission elec-  
14          tricity generating unit.

15          “(4) TAXABLE YEAR IN WHICH CREDIT TAKEN  
16          INTO ACCOUNT.—In the case of any credit (or por-  
17          tion thereof) with respect to which an election is  
18          made under paragraph (1), such credit shall be  
19          taken into account in the first taxable year of the el-  
20          igible project partner ending with, or after, the elect-  
21          ing taxpayer’s taxable year with respect to which the  
22          credit was determined.

23          “(5) LIMITATIONS ON ELECTION.—

24          “(A) TIME FOR ELECTION.—An election  
25          under this subsection to transfer any portion of

1 the credit allowed under this section shall be  
2 made not later than the due date for the return  
3 of tax for the electing taxpayer's taxable year  
4 with respect to which the credit was deter-  
5 mined.

6 “(B) NO FURTHER TRANSFERS.—No elec-  
7 tion may be made under this subsection by a  
8 taxpayer with respect to any portion of the  
9 credit allowed under this section which has been  
10 previously transferred to such taxpayer under  
11 this paragraph.

12 “(C) TREATMENT OF TRANSFER UNDER  
13 PRIVATE USE RULES.—For purposes of section  
14 141(b)(1), any benefit derived by an eligible  
15 project partner in connection with an election  
16 under this subsection shall not be taken into ac-  
17 count as a private business use.

18 “(D) ADDITIONAL ELECTION REQUIRE-  
19 MENTS.—The Secretary may prescribe such  
20 regulations as may be appropriate to carry out  
21 the purposes of this subsection, including—

22 “(i) rules for determining which per-  
23 sons are eligible project partners with re-  
24 spect to any energy property, and

1                   “(ii) requiring information to be in-  
2                   cluded in an election under paragraph (1)  
3                   or imposing additional reporting require-  
4                   ments.

5           “(f) TERMINATION.—This section shall apply to tax-  
6     able years ending before January 1, 2050.”.

7           (b) PART OF INVESTMENT CREDIT.—Section 46 of  
8     such Code is amended by striking “and” at the end of  
9     paragraph (5), by striking the period at the end of para-  
10    graph (6) and inserting “, and”, and by adding at the  
11    end the following new paragraph:

12                   “(7) the zero-emission electricity acceleration  
13                   investment credit.”.

14           (c) DIRECT PAY.—

15                   (1) IN GENERAL.—Section 6431(a) of such  
16     Code, as added by this Act, is amended by striking  
17     “or” at the end of paragraph (2), by redesignating  
18     paragraph (3) as paragraph (4), and by inserting  
19     after paragraph (2) the following new paragraph:

20                   “(3) any portion of a zero-emission electricity  
21                   acceleration investment credit which would (without  
22                   regard to this section) be determined under section  
23                   48D originally placed in service after December 31,  
24                   2021,”.

1           (2) CONFORMING AMENDMENT.—Section  
2           6431(d) of such Code, as added by this Act, is  
3           amended—

4                   (A) by striking “section 48 or the” and in-  
5                   serting “section 48, the”, and

6                   (B) by inserting after “section 45” the fol-  
7                   lowing: “, or the zero-emission electricity accel-  
8                   eration investment credit determined under sec-  
9                   tion 48D”.

10          (d) NORMALIZATION.—The penultimate sentence of  
11          section 50(d) is amended by inserting after “the applica-  
12          tion of section 48(a)(5) is elected” the following: “or any  
13          qualified zero-emission electricity generating unit with re-  
14          spect to which the zero-emission electricity acceleration in-  
15          vestment credit is determined under section 48D”.

16          (e) CLERICAL AMENDMENT.—The table of sections  
17          for subpart E of part IV of subchapter A of chapter 1  
18          of such Code is amended by inserting after the item relat-  
19          ing to section 48C the following new item:

          “Sec. 48D. Zero-emission electricity acceleration investment credit.”.

20          (f) EFFECTIVE DATE.—The amendments made by  
21          this section shall apply to taxable years beginning after  
22          the date of the enactment of this Act.

1 **SEC. 302. ZERO-EMISSION ELECTRICITY ACCELERATION**  
2 **GRANTS.**

3 (a) IN GENERAL.—Upon application, the Secretary  
4 of Energy shall, subject to the requirements of this section  
5 and the availability of appropriations for such purpose,  
6 provide a grant in an amount specified under subsection  
7 (b) to an eligible electricity provider that, during a cal-  
8 endar year, places into service one or more qualified zero-  
9 emission electricity generating units and either—

10 (1)(A) permanently retires every existing car-  
11 bon-emitting generating unit owned by the eligible  
12 electricity provider; and

13 (B) replaces the generation capacity of the car-  
14 bon-emitting generating units described in subpara-  
15 graph (A) with the generation capacity of such  
16 qualified zero-emission electricity generating unit or  
17 units in sufficient amounts to satisfy the condition  
18 specified in subsection (c); or

19 (2) generates not less than 80 percent of the  
20 electricity sold by such eligible electricity provider  
21 using generating units the operation of which does  
22 not result in the release of carbon dioxide into the  
23 atmosphere.

24 (b) GRANT AMOUNT.—

25 (1) IN GENERAL.—The amount of the grant  
26 under subsection (a) with respect to any qualified

1 zero-emission electricity generating unit placed in  
2 service during a calendar year shall be the applicable  
3 percentage of the cost of such qualified zero-emis-  
4 sion electricity generating unit.

5 (2) APPLICABLE PERCENTAGE.—For purposes  
6 of paragraph (1), the term “applicable percentage”  
7 means—

8 (A) for grants provided under subsection  
9 (a)(1)—

10 (i) 50 percent in the case of a quali-  
11 fied zero-emission electricity generating  
12 unit that is placed into service between the  
13 date of enactment of this Act and Decem-  
14 ber 31, 2025;

15 (ii) 48 percent in the case of a quali-  
16 fied zero-emission electricity generating  
17 unit that is placed into service during cal-  
18 endar year 2026;

19 (iii) 46 percent in the case of a quali-  
20 fied zero-emission electricity generating  
21 unit that is placed into service during cal-  
22 endar year 2027;

23 (iv) 44 percent in the case of a quali-  
24 fied zero-emission electricity generating

1 unit that is placed into service during cal-  
2 endar year 2028;

3 (v) 42 percent in the case of a quali-  
4 fied zero-emission electricity generating  
5 unit that is placed into service during cal-  
6 endar year 2029;

7 (vi) 40 percent in the case of a quali-  
8 fied zero-emission electricity generating  
9 unit that is placed into service during cal-  
10 endar year 2030;

11 (vii) 38 percent in the case of a quali-  
12 fied zero-emission electricity generating  
13 unit that is placed into service during cal-  
14 endar year 2031;

15 (viii) 36 percent in the case of a quali-  
16 fied zero-emission electricity generating  
17 unit that is placed into service during cal-  
18 endar year 2032;

19 (ix) 34 percent in the case of a quali-  
20 fied zero-emission electricity generating  
21 unit that is placed into service during cal-  
22 endar year 2033;

23 (x) 32 percent in the case of a quali-  
24 fied zero-emission electricity generating



1 unit that is placed into service during cal-  
2 endar year 2034; and

3 (xi) 30 percent in the case of a quali-  
4 fied zero-emission electricity generating  
5 unit that is placed into service during cal-  
6 endar year 2035; and

7 (B) for grants provided under subsection

8 (a)(2)—

9 (i) 43 percent in the case of a quali-  
10 fied zero-emission electricity generating  
11 unit that is placed into service between the  
12 date of enactment of this Act and Decem-  
13 ber 31, 2025;

14 (ii) 41 percent in the case of a quali-  
15 fied zero-emission electricity generating  
16 unit that is placed into service during cal-  
17 endar year 2026;

18 (iii) 39 percent in the case of a quali-  
19 fied zero-emission electricity generating  
20 unit that is placed into service during cal-  
21 endar year 2027;

22 (iv) 37 percent in the case of a quali-  
23 fied zero-emission electricity generating  
24 unit that is placed into service during cal-  
25 endar year 2028;

1 (v) 35 percent in the case of a quali-  
2 fied zero-emission electricity generating  
3 unit that is placed into service during cal-  
4 endar year 2029; and

5 (vi) 33 percent in the case of a quali-  
6 fied zero-emission electricity generating  
7 unit that is placed into service during cal-  
8 endar year 2030.

9 (c) CONDITIONS FOR THE GRANT.—No grant shall  
10 be made under this section unless the Secretary of Energy  
11 determines that the eligible electricity provider, as of De-  
12 cember 31st of the calendar year the qualified zero-emis-  
13 sion electricity generating unit for which a grant will be  
14 provided is placed in service, owns generating units that  
15 have an aggregate generation capacity that is not less than  
16 the annualized amount of generation capacity that is  
17 owned by such eligible electricity provider during the 5-  
18 year period ending on the date of the enactment of this  
19 section.

20 (d) APPLICATION OF CERTAIN RULES.—In making  
21 grants under subsection (a)(1), the Secretary of Energy  
22 shall apply rules similar to the rules of section 50 of the  
23 Internal Revenue Code of 1986 (other than subsections  
24 (b)(3) and (b)(4)(A)(i) thereof). In applying such rules,  
25 if an eligible electricity provider acquires a carbon-emit-

1 ting generating unit after a grant is made to the eligible  
2 electricity provider, the Secretary shall provide for the re-  
3 capture of the appropriate percentage of the grant amount  
4 in such manner as the Secretary determines appropriate.

5 (e) DURATION.—Grants may be made—

6 (1) under subsection (a)(1) for qualified zero-  
7 emission electricity generating units that are placed  
8 into service after the date of enactment of this Act  
9 through calendar year 2035; and

10 (2) under subsection (a)(2) for qualified zero-  
11 emission electricity generating units that are placed  
12 into service after the date of enactment of this Act  
13 through calendar year 2030.

14 (f) DEFINITIONS.—For purposes of this section:

15 (1) CARBON-EMITTING GENERATING UNIT.—

16 The term “carbon-emitting generating unit” means  
17 a generating unit the operation of which results in  
18 the release of carbon dioxide to the atmosphere.

19 (2) ELIGIBLE ELECTRICITY PROVIDER.—The

20 term “eligible electricity provider” means an entity  
21 in the United States that—

22 (A) owns one or more generating units;

23 and

24 (B) sells the electricity generated by such  
25 generating units.

1           (3) GENERATING UNIT.—The term “generating  
2           unit” has the meaning given such term in section  
3           201 of the Clean Energy Innovation and Deploy-  
4           ment Act of 2021.

5           (4) QUALIFIED ZERO-EMISSION ELECTRICITY  
6           GENERATING UNIT.—The term “qualified zero-emis-  
7           sion electricity generating unit” means a generating  
8           unit—

9                   (A) that is placed into service after the  
10                  date of enactment of this section; and

11                   (B) the operation of which does not result  
12                  in the release of carbon dioxide into the atmos-  
13                  phere.

14 **SEC. 303. RECIPIENTS OF CERTAIN CLEAN ENERGY INVEST-**  
15 **MENT TAX CREDITS.**

16           Any person who—

17                   (1) is allowed a tax credit under section 45V of  
18                  the Internal Revenue Code of 1986 for any taxable  
19                  year shall not be provided a grant under section 302  
20                  during any fiscal year; and

21                   (2) receives a grant under section 302 during  
22                  any fiscal year shall not be allowed a tax credit  
23                  under section 45V of such Code for any taxable  
24                  year.

1 **Subtitle B—Carbon-Targeted Zero-**  
 2 **Emission Electricity Tax Credit**

3 **SEC. 311. CARBON-TARGETED ZERO-EMISSION ELEC-**  
 4 **TRICITY TAX CREDIT.**

5 (a) IN GENERAL.—Subpart D of part IV of sub-  
 6 chapter A of chapter 1 of the Internal Revenue Code of  
 7 1986 is amended by adding at the end the following:

8 **“SEC. 45U. CARBON-TARGETED ZERO-EMISSION ELEC-**  
 9 **TRICITY TAX CREDIT.**

10 “(a) AMOUNT OF CREDIT.—

11 “(1) IN GENERAL.—For purposes of section 38,  
 12 the carbon-targeted zero-emission electricity tax  
 13 credit for any taxable year is an amount equal to the  
 14 product of—

15 “(A) 2.4 cents, multiplied by

16 “(B) the kilowatt hours of electricity—

17 “(i) produced by the taxpayer—

18 “(I) from qualified energy re-  
 19 sources, and

20 “(II) at a qualified facility, and

21 “(ii) sold by the taxpayer to an unre-  
 22 lated person during the taxable year.

23 “(2) REDEVELOPMENT CREDIT.—A qualified  
 24 facility shall receive an additional 0.5 cents per  
 25 KWh if such facility is placed in service on a

1 brownfield site (as defined in 42 U.S.C. 9601(39)),  
2 landfill, abandoned mine, or reclamation site.

3 “(3) CREDIT GRADIENT FOR CO-BENEFITS.—

4 The Secretary shall develop an additional credit, in  
5 consultation with the Secretary of Agriculture and  
6 the Director of the Fish and Wildlife Service, for  
7 new development or redevelopment projects on de-  
8 graded lands that would enhance ecological co-bene-  
9 fits including—

10 “(A) biodiversity,

11 “(B) habitat connectivity, and

12 “(C) water quality.

13 “(4) NON-FOSSIL FUEL COMBUSTION AND GAS-  
14 IFICATION.—In the case of a qualified facility that  
15 produces electricity through combustion or gasifi-  
16 cation of a non-fossil fuel, the carbon dioxide emis-  
17 sions rate for such facility shall be equal to the net  
18 rate of carbon dioxide emitted into the atmosphere  
19 by such facility (taking into account the amount of  
20 lifecycle greenhouse gas emissions), in the produc-  
21 tion of electricity, expressed as grams of CO<sub>2</sub>e per  
22 KWh.

23 “(5) SPECIFIC REQUIREMENTS.—In the case of  
24 biomass-based electricity production, a qualified fa-

1 cility must meet the required definition of renewable  
2 biomass.

3 “(6) CARBON CAPTURE AND SEQUESTRATION  
4 EQUIPMENT.—For purposes of this subsection, the  
5 amount of greenhouse gases emitted into the atmos-  
6 phere by a qualified facility in the production of  
7 electricity shall not include any qualified carbon di-  
8 oxide or other carbon oxide (as defined in section  
9 45Q(c)(1)(B)) that is captured by the taxpayer  
10 and—

11 “(A) disposed of by the taxpayer in secure  
12 geological storage in a manner that satisfies the  
13 measures established by regulation under sec-  
14 tion 45Q(f)(2), or

15 “(B) utilized by the taxpayer in a manner  
16 described in section 45Q(f)(5).

17 “(7) ONLY PRODUCTION IN THE UNITED  
18 STATES TAKEN INTO ACCOUNT.—Consumption or  
19 sales shall be taken into account under this section  
20 only with respect to electricity, the production of  
21 which is within the United States or any territory or  
22 possession of the United States.

23 “(8) COMBINED HEAT AND POWER SYSTEM  
24 PROPERTY.—For purposes of paragraph (1)(C), the  
25 kilowatt hours of electricity produced by a taxpayer

1 at a qualified facility shall include any production in  
2 the form of useful thermal energy by any combined  
3 heat and power system property within such facility.

4 “(9) INFLATION ADJUSTMENT.—

5 “(A) IN GENERAL.—In the case of a cal-  
6 endar year beginning after 2022, the 2.4 cent  
7 amount in subsection (b)(1)(A) shall be ad-  
8 justed by multiplying such amount by the infla-  
9 tion adjustment factor for the calendar year in  
10 which the sale or use of the electricity occurs.  
11 If any amount as increased under the preceding  
12 sentence is not a multiple of 0.1 cent, such  
13 amount shall be rounded to the nearest multiple  
14 of 0.1 cent.

15 “(B) ANNUAL COMPUTATION.—The Sec-  
16 retary shall, not later than April 1 of each cal-  
17 endar year, determine and publish in the Fed-  
18 eral Register the inflation adjustment factor for  
19 such calendar year in accordance with this sub-  
20 section.

21 “(C) INFLATION ADJUSTMENT FACTOR.—  
22 The term ‘inflation adjustment factor’ means,  
23 with respect to a calendar year, a fraction, the  
24 numerator of which is the GDP implicit price  
25 deflator for the preceding calendar year and the



1 denominator of which is the GDP implicit price  
2 deflator for the calendar year 2021. The term  
3 ‘GDP implicit price deflator’ means the most  
4 recent revision of the implicit price deflator for  
5 the gross domestic product as computed and  
6 published by the Department of Commerce be-  
7 fore March 15 of the calendar year.

8 “(b) DEFINITIONS.—For purposes of this section—

9 “(1) CARBON DIOXIDE EMISSION RATE.—For  
10 purposes of this section, the term ‘carbon dioxide  
11 emissions rate’ means the amount of carbon dioxide  
12 emitted into the atmosphere by a qualified facility in  
13 the production of electricity, expressed as grams of  
14 CO<sub>2</sub>e per kWh.

15 “(2) CO<sub>2</sub>E PER KWH.—The term ‘CO<sub>2</sub>e per  
16 kWh’ means, with respect to any greenhouse gas,  
17 the equivalent volume of carbon dioxide emitted (as  
18 determined based on relative global warming poten-  
19 tial) per kilowatt hour of electricity produced.

20 “(3) QUALIFIED FACILITY.—The term ‘quali-  
21 fied facility’ means a facility that is—

22 “(A) used for the generation of electricity,

23 and

24 “(B) originally placed in service after De-  
25 cember 31, 2021, and before the United States

1 electricity-generating sector emits a net total of  
2 zero carbon dioxide-equivalent emissions, after  
3 accounting for carbon dioxide removal strate-  
4 gies,

5 “(C) located in a qualifying State, and

6 “(D) certified to produce electricity at a  
7 carbon dioxide emission rate below the quali-  
8 fying facility emission rate.

9 “(4) LIMITATIONS.—

10 “(A) 10-YEAR CREDIT.—For purposes of  
11 this section, a facility shall only be treated as  
12 a qualified facility during the 10-year period be-  
13 ginning on the date the facility was originally  
14 placed in service.

15 “(B) EXISTING FACILITIES.—In the case  
16 of a facility that was placed in service before  
17 January 1, 2022, but is otherwise described in  
18 paragraph (3), such facility shall be a qualified  
19 facility, but only to the extent of the increased  
20 amount of electricity produced at the facility by  
21 reason of the following:

22 “(i) a new unit placed in service after  
23 December 31, 2021, or

1                   “(ii) any efficiency improvements or  
2                   additions of capacity placed in service after  
3                   December 31, 2021.

4                   “(5) QUALIFIED FACILITY EMISSION RATE.—  
5                   The qualified facility emission rate is 150 grams of  
6                   CO<sub>2</sub>e per KWh.

7                   “(6) QUALIFYING STATE.—

8                   “(A) IN GENERAL.—The term ‘qualifying  
9                   state’ means a state determined by the Sec-  
10                  retary, in consultation with the Secretary of  
11                  Energy, to have an above-median marginal car-  
12                  bon dioxide emission rate for the electricity sec-  
13                  tor.

14                  “(B) PUBLICATION.—The Secretary shall  
15                  annually publish the list of such States.

16                  “(7) MARGINAL CARBON DIOXIDE EMISSION  
17                  RATE.—The term ‘marginal carbon dioxide emission  
18                  rate’ is defined as the short-run marginal emission  
19                  rate for end-use load, which is the rate of emissions  
20                  that would be induced by a marginal increase in a  
21                  region’s load at a specific point in time. The value  
22                  is the emission rate of whichever generator would  
23                  have served the marginal increase in load, modified  
24                  by any relevant transmission, distribution, and effi-  
25                  ciency losses.

1           “(8) COMBINED HEAT AND POWER SYSTEM  
2 PROPERTY.—For purposes of this paragraph, the  
3 term ‘combined heat and power system property’ has  
4 the same meaning given such term by section  
5 48(c)(3) (without regard to subparagraphs (A)(iv),  
6 (B), and (D) thereof).

7           “(9) RENEWABLE BIOMASS.—

8           “(A) IN GENERAL.—The term ‘renewable  
9 biomass’ means—

10           “(i) crop byproducts or crop residues  
11 that—

12           “(I) are harvested from actively  
13 managed or fallow agricultural land  
14 that is cleared prior to January 1,  
15 2021, and

16           “(II) are procured at a rate that  
17 adequately maintains soil carbon and  
18 prevents erosion;

19           “(ii) ‘closed-loop biomass’ as defined  
20 in section 1914(e)(B)(2) of the Energy  
21 Policy Act of 1992 harvested from land  
22 cleared prior to January 1, 2021;

23           “(iii) byproducts of wood or paper  
24 mill operations, including lignin in spent  
25 pulping liquors;

1 “(iv) algae;

2 “(v) nonhazardous plant matter de-  
3 rived from waste—

4 “(I) including separated yard  
5 waste, landscape right-of-way trim-  
6 mings, and food waste; but

7 “(II) not including municipal  
8 solid waste, recyclable waste paper,  
9 painted, treated or pressurized wood,  
10 or wood contaminated with plastic or  
11 metals; and

12 “(vi) vegetative matter removed from  
13 within 200 yards of any man-made struc-  
14 ture or campground for the purposes of  
15 hazardous fuels thinning.

16 “(B) EXCLUSION OF INVASIVE SPECIES.—

17 “(i) IN GENERAL.—Notwithstanding  
18 subparagraph (A), except as provided in  
19 clause (ii), the term ‘renewable biomass’  
20 does not include any matter derived from  
21 a plant that is invasive or noxious, or from  
22 a species or variety of plants that credible  
23 risk assessment tools or other credible  
24 sources determine is potentially invasive,  
25 as determined by the Secretary, in con-

1                   sultation with other appropriate Federal or  
2                   State departments and agencies.

3                   “(ii) EXCEPTION.—The term ‘renew-  
4                   able biomass’ includes matter derived from  
5                   a plant that is invasive or noxious, or from  
6                   a species or variety of plants that credible  
7                   risk assessment tools or other credible  
8                   sources determine is potentially invasive,  
9                   if—

10                   “(I) the matter was removed for  
11                   purposes of control or eradication of  
12                   the invasive, noxious, or potentially  
13                   invasive plant; and

14                   “(II) the invasive, noxious, or po-  
15                   tentially invasive plant was not plant-  
16                   ed for the purpose of using the plant  
17                   as an energy crop.

18                   “(10) DEGRADED LANDS.—The term ‘degraded  
19                   lands’ means land that has lost a large degree of its  
20                   natural productivity due to human-caused processes,  
21                   the scope of which shall be defined by the Secretary,  
22                   in consultation with the Secretary of Agriculture and  
23                   the Director of the Fish and Wildlife Service.

24                   “(c) TRANSFERABILITY.—

1           “(1) IN GENERAL.—If, with respect to a credit  
2 under subsection (a) for any taxable year—

3           “(A) a qualified facility would be the tax-  
4 payer (but for this subparagraph),

5           “(B) such facility elects the application of  
6 this paragraph for such taxable year with re-  
7 spect to all (or any portion specified in such  
8 election) of such credit, and

9           “(C) the eligible project partner specified  
10 in such election, and not the qualified facility,  
11 shall be treated as the taxpayer for purposes of  
12 this title with respect to such credit (or such  
13 portion thereof).

14           “(2) ELIGIBLE PROJECT PARTNER.—For pur-  
15 poses of this paragraph, the term ‘eligible project  
16 partner’ means any person who—

17           “(A) is responsible for, or participates in,  
18 the design or construction of the qualified facil-  
19 ity to which the credit under subsection (a) re-  
20 lates,

21           “(B) is a financial institution providing fi-  
22 nancing for the construction or operation of  
23 such facility, or

24           “(C) has an ownership interest in such fa-  
25 cility.

1 “(d) SPECIAL RULES.—

2 “(1) PRODUCTION ATTRIBUTABLE TO THE TAX-  
3 PAYER.—In the case of a qualified facility in which  
4 more than 1 person has an ownership interest, ex-  
5 cept to the extent provided in regulations prescribed  
6 by the Secretary, production from the facility shall  
7 be allocated among such persons in proportion to  
8 their respective ownership interests in the gross  
9 sales from such facility.

10 “(2) RELATED PERSONS.—Persons shall be  
11 treated as related to each other if such persons  
12 would be treated as a single employer under the reg-  
13 ulations prescribed under section 52(b). In the case  
14 of a corporation which is a member of an affiliated  
15 group of corporations filing a consolidated return,  
16 such corporation shall be treated as selling electricity  
17 to an unrelated person if such electricity is sold to  
18 such a person by another member of such group.

19 “(3) PASS-THRU IN THE CASE OF ESTATES AND  
20 TRUSTS.—Under regulations prescribed by the Sec-  
21 retary, rules similar to the rules of subsection (d) of  
22 section 52 shall apply.

23 “(e) ADDITIONAL CONSIDERATIONS.—For purposes  
24 of subsection (b)(3), the Secretary shall take into consider-  
25 ation only those facilities that—



1           “(1) ensure laborers and mechanics employed  
2           by contractors and subcontractors in the perform-  
3           ance of any qualifying advanced energy project shall  
4           be paid wages at rates not less than the prevailing  
5           rates on projects of a similar character in the local-  
6           ity as determined by the Secretary of Labor, in ac-  
7           cordance with subchapter IV of chapter 31 of title  
8           40, United States Code,

9           “(2) ensure that, to the maximum extent fea-  
10          sible, iron, steel, and manufactured products used in  
11          the facility are produced in the United States, and

12          “(3) prioritize hiring of dislocated workers who  
13          were previously employed in manufacturing, coal  
14          power plants, or coal mining.”.

15          (b) ADMINISTRATION OF CREDIT.—The Secretary of  
16          the Treasury shall implement the carbon-targeted zero-  
17          emission electricity tax credit under section 45 of the In-  
18          ternal Revenue Code of 1986, as added by this Act, in  
19          consultation with the Secretary of Energy.

20          (c) CREDIT PART OF GENERAL BUSINESS CREDIT.—  
21          Section 38(b) is amended by striking “plus” at the end  
22          of paragraph (32), by striking the period at the end of  
23          paragraph (33) and inserting “, plus”, and by adding at  
24          the end the following new paragraph:

1           “(34) the carbon-targeted zero-emission elec-  
2           tricity tax credit determined under section 45U.”.

3           (d) CLERICAL AMENDMENT.—The table of sections  
4 for subpart D of part IV of subchapter A of chapter 1  
5 is amended by adding at the end the following new item:  
“Sec. 45U. Carbon-targeted zero-emission electricity tax credit.”.

6           (e) EFFECTIVE DATE.—The amendments made by  
7 this section shall apply to taxable years ending after the  
8 date of the enactment of this Act.

9   **SEC. 312. ELECTION TO TREAT CARBON-TARGETED ZERO-**  
10                           **EMISSION ELECTRICITY FACILITY AS EN-**  
11                           **ERGY PROPERTY.**

12           (a) IN GENERAL.—Section 48(a)(5)(C)(i) of the In-  
13 ternal Revenue Code of 1986 is amended—

14           (1) by striking “which is a qualified facility  
15           (within the meaning of section 45)” and inserting  
16           the following: “which is—

17                           “(I) a qualified facility (within  
18                           the meaning of section 45)”,

19           (2) by inserting “or” at the end, and

20           (3) by adding at the end the following new sub-  
21           clause:

22                           “(II) a qualified facility (as de-  
23                           fined in section 45U(b)(3)).”.

24           (b) INCREASE IN CREDIT PERCENTAGE FOR CER-  
25 TAIN FACILITIES.—Section 48(a)(5) of such Code is

1 amended by adding at the end the following new subpara-  
2 graph:

3           “(G) INCREASE IN CREDIT PERCENTAGE  
4           FOR CARBON-TARGETED ZERO-EMISSION ELEC-  
5           TRICITY FACILITY PLACED IN SERVICE ON  
6           BROWNFIELD SITE.—In the case of a qualified  
7           facility described in section 45U(a)(2), subpara-  
8           graph (A)(ii) shall be applied by substituting  
9           ‘35 percent’ for ‘30 percent’.”.

10       (c) NORMALIZATION RULES.—Section 50(d) of such  
11 Code is amended by adding at the end the following new  
12 sentence: “At the election of a taxpayer with respect to  
13 public utility property, the rules of the section 46(f) re-  
14 ferred to in paragraph (2) shall not apply to energy prop-  
15 erty (as defined in section 48(a)(3)) which is a qualified  
16 facility (as defined in section 45U(b)(3)) with respect to  
17 which the application of section 48(a)(5) is elected. Such  
18 election shall be made on a property-by-property basis on  
19 a timely filed return for the taxable year in which such  
20 property is placed in service, and once made, may be re-  
21 voked only with the consent of the Secretary.”.

22       (d) CONFORMING AMENDMENTS.—

23           (1) Section 48(a)(5)(B) of such Code is amend-  
24           ed by inserting “or 45U” after “section 45”.



1 regard to this section) be determined under section  
2 45U with respect to property originally placed in  
3 service after December 31, 2021, or

4 “(3) any portion of a credit carryforward to the  
5 extent attributable to the portion of such a credit  
6 that is allowed under section 38(a)(1) (determined  
7 without regard to section 38(c)) for taxable years  
8 ending after December 31, 2021,

9 such taxpayer shall be treated as making a payment  
10 against the tax imposed by subtitle A for the taxable year  
11 equal to such amount.

12 “(b) TIMING.—The payment described in subsection  
13 (a) shall be treated as made on the later of the due date  
14 of the return of tax (determined without extensions) for  
15 such taxable year or the date on which such return is filed.

16 “(c) EXCLUSION FROM GROSS INCOME.—Gross in-  
17 come of the taxpayer shall be determined without regard  
18 to this section.

19 “(d) DENIAL OF DOUBLE BENEFIT.—Solely for pur-  
20 poses of section 38, in the case of a taxpayer making an  
21 election under this section, the energy credit determined  
22 under section 48 or the renewable electricity production  
23 credit determined under section 45 shall be reduced by  
24 the amount of the portion of such credit with respect to  
25 which the taxpayer makes such election.

1 “(e) SPECIAL RULES.—

2 “(1) In the case of a taxpayer making an elec-  
3 tion under this section, the credit subject to such an  
4 election shall be determined notwithstanding—

5 “(A) section 50(b)(3); and

6 “(B) section 50(b)(4) for an entity de-  
7 scribed in 50(b)(4)(A)(i).

8 “(2) In the case of a mutual or cooperative  
9 electric company described in this paragraph or an  
10 organization described in section 1381(a)(2), income  
11 received or accrued in connection with the refunding  
12 or direct payment of credit under this section shall  
13 be treated as an amount collected from members for  
14 the sole purpose of meeting losses and expenses.”.

15 (b) CLERICAL AMENDMENT.—The table of sections  
16 for subchapter B of chapter 65 of such Code is amended  
17 by adding at the end the following new item:

“Sec. 6431. Elective payment of production and investment tax credits for car-  
bon-targeted zero-emission electricity facilities.”.

18 (c) EFFECTIVE DATE.—The amendments made by  
19 this section shall apply to taxable years ending after the  
20 date of the enactment of this Act.

1     **TITLE IV—LOW-INCOME RATE-**  
2                   **PAYER PROTECTION**

3     **SEC. 400. PURPOSE.**

4             The purpose of this title is to provide low-income resi-  
5     dents technical and financial assistance to help reduce en-  
6     ergy bills, including by making homes more energy effi-  
7     cient.

8     **SEC. 401. WEATHERIZATION ASSISTANCE PROGRAM.**

9             (a) DWELLING UNIT AVERAGES.—Section 415(c) of  
10     the Energy Conservation and Production Act (42 U.S.C.  
11     6865(c)) is amended—

12                 (1) in paragraph (1), by striking “\$6,500 per  
13             dwelling unit” and inserting “\$10,000 per dwelling  
14             unit”; and

15                 (2) in paragraph (4), by striking “\$3,000 per  
16             dwelling unit” and inserting “\$8,000 per dwelling  
17             unit”.

18             (b) AUTHORIZATION.—Section 422 of the Energy  
19     Conservation and Production Act (42 U.S.C. 6872) is  
20     amended by striking paragraphs (1) and (2) and inserting  
21     the following:

22                         “(1) \$350,000,000 for fiscal year 2022;

23                         “(2) \$400,000,000 for fiscal year 2023;

24                         “(3) \$500,000,000 for fiscal year 2024;

25                         “(4) \$600,000,000 for fiscal year 2025; and

1 “(5) \$700,000,000 for fiscal year 2026.”.

2 **SEC. 402. LIHEAP AUTHORIZATION.**

3 Section 2602 of the Low-Income Home Energy As-  
4 sistance Act of 1981 (42 U.S.C. 8621) is amended—

5 (1) in subsection (b), by striking “through  
6 2007” and inserting “through 2030”; and

7 (2) in subsection (d)—

8 (A) in paragraph (1), by striking “through  
9 2004” and inserting “through 2030”; and

10 (B) in paragraph (2), by striking “through  
11 2004” and inserting “through 2030”.

12 **TITLE V—ENERGY WORKFORCE**  
13 **TRANSITION AND TRAINING**

14 **SEC. 500. PURPOSES AND DEFINITIONS.**

15 (a) **PURPOSES.**—The purposes of this title are to pro-  
16 vide for a transition to a modern energy system, including  
17 by ensuring that—

18 (1) the United States has a workforce prepared  
19 to address the needs of the modern energy system;

20 (2) workers in declining energy sectors and in  
21 disenfranchised communities acquire well-paying  
22 jobs in growing energy sectors;

23 (3) communities, especially those that are dis-  
24 proportionately vulnerable to the impacts of climate



1 change and other pollution, can be made resilient to  
2 the impacts of climate change; and

3 (4) communities that are primarily dependent  
4 on fossil fuel revenues can be made resilient to the  
5 economic impacts of energy transition.

6 (b) DEFINITIONS.—In this title:

7 (1) ADVISORY COMMITTEE.—The term “Advi-  
8 sory Committee” means the Energy Workforce  
9 Transition Advisory Committee established by sec-  
10 tion 511(e).

11 (2) APPRENTICESHIP PROGRAM.—The term  
12 “apprenticeship program” means an apprenticeship  
13 registered under the Act of August 16, 1937 (29  
14 U.S.C. 50 et seq.) (commonly known as the “Na-  
15 tional Apprenticeship Act”), that meets the require-  
16 ments of parts 29 and 30 of title 29, Code of Fed-  
17 eral Regulations, as in effect on December 30, 2019.

18 (3) DIRECTOR.—The term “Director” means  
19 the Director of the Office.

20 (4) ENERGY-RELATED FACILITY.—The term  
21 “energy-related facility” includes a coal mine, a coal-  
22 fueled electric generating facility, an oil and natural  
23 gas extraction operation, or a natural gas-fueled  
24 electric generating facility.

1 (5) ENERGY-RELATED INDUSTRIAL FACILITY.—

2 The term “energy-related industrial facility” in-  
3 cludes a facility in the manufacturing and transpor-  
4 tation supply chains of an energy-related facility.

5 (6) ENERGY TRANSITION COMMUNITY.—The

6 term “energy transition community” means a mu-  
7 nicipality, county, region, or Tribal or indigenous  
8 community that has been affected since calendar  
9 year 2008 or later, or that demonstrates it will be  
10 impacted in the next 36 months, by the loss of 50  
11 or more jobs in total as a result of the closure of a  
12 energy-related facility, a energy-related industrial fa-  
13 cility, or other type of energy-related entity, as de-  
14 termined by the Director.

15 (7) ENERGY TRANSITION WORKER.—The term

16 “energy transition worker” means a worker, includ-  
17 ing a worker employed by contractors or subcontractors,  
18 who is terminated, laid off from employment,  
19 or whose work hours have been reduced, on or after  
20 the date of enactment of this Act, from a energy-re-  
21 lated facility, energy-related industrial facility, or  
22 other type of energy-related entity.

23 (8) ENERGY WORKFORCE TRANSITION PLAN.—

24 The term “Energy Workforce Transition Plan”  
25 means the plan developed under section 511(e).

1           (9) ENVIRONMENTAL JUSTICE COMMUNITY.—

2           The term “environmental justice community” means  
3           a community with significant representation of com-  
4           munities of color, low-income communities, or Tribal  
5           and indigenous communities, that experiences, or is  
6           at risk of experiencing, higher or more adverse  
7           human health or environmental effects.

8           (10) INDIAN TRIBE.—The term “Indian Tribe”  
9           has the meaning given such term in section 4 of the  
10          Indian Self-Determination and Education Assistance  
11          Act (25 U.S.C. 5304).

12          (11) INSTITUTION OF HIGHER EDUCATION.—  
13          The term “institution of higher education” has the  
14          meaning given such term in section 101 of the High-  
15          er Education Act of 1965 (20 U.S.C. 1001).

16          (12) LABOR ORGANIZATION.—The term “labor  
17          organization” has the meaning given such term in  
18          section 2 of the National Labor Relations Act (29  
19          U.S.C. 152).

20          (13) LOCAL EDUCATIONAL AGENCY.—The term  
21          “local educational agency” has the meaning given  
22          such term in section 8101 of the Elementary and  
23          Secondary Education Act of 1965 (20 U.S.C. 7801).

24          (14) LOCAL WORKFORCE DEVELOPMENT  
25          BOARD.—The term “local workforce development

1 board” means a board established under section 107  
2 of the Workforce Innovation and Opportunity Act  
3 (29 U.S.C. 3122).

4 (15) MEMBER OF THE RESERVE COMPONENTS  
5 OF THE ARMED FORCES.—The term “member of the  
6 reserve components of the Armed Forces” means a  
7 member of the—

8 (A) Army National Guard of the United  
9 States;

10 (B) Army Reserve;

11 (C) Navy Reserve;

12 (D) Marine Corps Reserve;

13 (E) Air National Guard of the United  
14 States;

15 (F) Air Force Reserve; or

16 (G) Coast Guard Reserve.

17 (16) MINORITY INSTITUTION.—The term “mi-  
18 nority institution” has the meaning given that term  
19 in section 365(3) of the Higher Education Act of  
20 1965 (20 U.S.C. 1067k(3)).

21 (17) NONPROFIT ORGANIZATION.—The term  
22 “nonprofit organization” means a group organized  
23 for purposes other than generating profit and in  
24 which no part of the organization’s income is distrib-  
25 uted to its members, directors, or officers.

1           (18) OFFICE.—The term “Office” means the  
2 Energy Workforce Transition Office established by  
3 section 511.

4           (19) PRE-APPRENTICESHIP.—The term “pre-  
5 apprenticeship” means, with respect to a program,  
6 an initiative or set of strategies that—

7                   (A) is designed to prepare participants to  
8 enter an apprenticeship program;

9                   (B) is carried out by an eligible sponsor  
10 that has a documented partnership with one or  
11 more sponsors of apprenticeship programs; and

12                   (C) includes each of the following:

13                           (i) Training (including a curriculum  
14 for the training) aligned with industry  
15 standards related to an apprenticeship pro-  
16 gram and reviewed and approved annually  
17 by sponsors of the apprenticeship program  
18 within the documented partnership that  
19 will prepare participants by teaching the  
20 skills and competencies needed to enter  
21 one or more apprenticeship programs.

22                           (ii) Hands-on training and theoretical  
23 education for participants that does not  
24 displace a paid employee.

1 (iii) A formal agreement with a spon-  
2 sor of an apprenticeship program that  
3 would enable participants who successfully  
4 complete the pre-apprenticeship program—

5 (I) to enter into the apprentice-  
6 ship program if a place in the pro-  
7 gram is available and if the partici-  
8 pant meets the qualifications of the  
9 apprenticeship program; and

10 (II) to earn credits towards the  
11 apprenticeship program.

12 (20) SECRETARY.—The term “Secretary”  
13 means the Secretary of Energy.

14 (21) TRIBAL OR INDIGENOUS COMMUNITY.—  
15 The term “Tribal or indigenous community” means  
16 a population of people who are members of—

17 (A) a federally recognized Indian Tribe;

18 (B) a State-recognized Indian Tribe;

19 (C) an Alaska Native or Native Hawaiian  
20 community or organization; or

21 (D) any other community of indigenous  
22 people located in a State.

23 (22) UNDEREMPLOYED.—The term “under-  
24 employed” means with respect to an individual, an  
25 individual who is—

1           (A) employed at less than full-time because  
2           they are unable to obtain full-time employment;  
3           or

4           (B) employed at a job that is inadequate  
5           to their training or economic needs.

6           (23) VETERAN OF THE ARMED FORCES.—The  
7           term “veteran of the Armed Forces” means a person  
8           who served in the active military, naval, or air serv-  
9           ice and who was discharged or released under condi-  
10          tions other than dishonorable.

11          (24) WAGE DIFFERENTIAL BENEFIT.—The  
12          term “wage differential benefit” means the dif-  
13          ference between the wages and other benefits pro-  
14          vided by—

15               (A) a worker’s wages and benefits earned  
16               in a energy-related facility, energy-related in-  
17               dustrial facility, or other energy-related entity  
18               on the day before the worker is terminated, laid  
19               off, or given a reduction in work hours; and

20               (B) the worker’s current wages and bene-  
21               fits, if any, after such a termination, lay-off, or  
22               reduction in work hours.

## 1       **Subtitle A—State Energy Plans**

### 2       **SEC. 501. STATE ENERGY PLANS.**

3           (a) IN GENERAL.—Section 362(d) of the Energy Pol-  
4       icy and Conservation Act (42 U.S.C. 6322(d)) is amend-  
5       ed—

6           (1) in paragraph (16), by striking “; and” and  
7       inserting a semicolon;

8           (2) by redesignating paragraph (17) as para-  
9       graph (18); and

10          (3) by inserting after paragraph (16) the fol-  
11       lowing:

12           “(17) a State energy plan developed in accord-  
13       ance with section 367; and”.

14          (b) STATE ENERGY PLANS.—Part D of title III of  
15       the Energy Policy and Conservation Act (42 U.S.C. 6321  
16       et seq.) is amended by adding at the end the following:

### 17       **“SEC. 367. STATE ENERGY PLANS.**

18           “(a) IN GENERAL.—The Secretary may provide fi-  
19       nancial assistance to a State to develop a State energy  
20       plan, for inclusion in a State energy conservation plan  
21       under section 362(d), to provide for—

22           “(1) the elimination of net greenhouse gas  
23       emissions;

24           “(2) improved air and water quality;

25           “(3) conservation of natural resources;



1           “(4) reduction and elimination of environmental  
2           injustice; and

3           “(5) workforce transition planning.

4           “(b) CONTENTS.—A State developing a State energy  
5           plan under this section shall include in such plan, meas-  
6           ures to—

7           “(1) ensure that the full social cost of carbon  
8           pollution is factored into decision making associated  
9           with electricity generation and utility investments in  
10          energy efficiency and electric vehicle infrastructure;

11          “(2) promote investments in a distribution sys-  
12          tem that takes advantage of technology advancement  
13          and supports reduced pollution, consumer choice,  
14          and a resilient and reliable system;

15          “(3) address the need to site transmission lines  
16          and new electricity generating units efficiently;

17          “(4) evaluate the role of existing resources as  
18          part of utility planning to accelerate the transition  
19          to low-cost carbon emissions reductions;

20          “(5) engage with regional partners to explore  
21          the potential benefits of regional markets;

22          “(6) support utility leadership in its efforts to  
23          transition to sources of electricity that result in net  
24          zero greenhouse gas emissions;

1           “(7) support infrastructure upgrades and smart  
2 grid investments to improve system-wide efficiency;

3           “(8) support building codes for new and retro-  
4 fitted buildings that promote the energy efficiency of  
5 buildings and the electric grid;

6           “(9) support improved appliance efficiency  
7 standards;

8           “(10) support investments in electric vehicle in-  
9 frastructure in ways that will ensure a more efficient  
10 grid and greater adoption of electric vehicles, includ-  
11 ing in rural areas;

12           “(11) support workforce and economic transi-  
13 tion planning for communities impacted by a chang-  
14 ing energy landscape, as informed by the Energy  
15 Workforce Transition Plan developed under section  
16 511 of the Clean Energy Innovation and Deploy-  
17 ment Act of 2021, and the Clean Energy Jobs  
18 Training Program established under section 522 of  
19 such Act;

20           “(12) support sustainable recreation and tour-  
21 ism in workforce and economic transition planning;

22           “(13) eliminate the disproportionate burden of  
23 adverse human health or environmental effects on  
24 communities of color, low-income communities, and

1 Tribal or indigenous communities in such State, as  
2 determined by the Secretary;

3 “(14) support increased acknowledgment of,  
4 and considerations for, indigenous and Tribal sov-  
5 ereignty; and

6 “(15) develop strategies to support local clean  
7 energy goals facilitating utility-community coopera-  
8 tion and private sector partnerships.

9 “(c) COORDINATION.—In developing a State energy  
10 plan under this section, a State shall coordinate, as appro-  
11 priate, with—

12 “(1) State regulatory authorities (as defined in  
13 section 3 of the Public Utility Regulatory Policies  
14 Act of 1978);

15 “(2) electric utilities;

16 “(3) Regional Transmission Organizations (as  
17 defined in section 3 of the Federal Power Act) and  
18 Independent System Operators (as defined in section  
19 3 of the Federal Power Act);

20 “(4) private entities, including representatives  
21 from the power sector and clean energy industry;

22 “(5) State agencies, metropolitan planning or-  
23 ganizations, and local governments;

1           “(6) the Energy Workforce Transition Office  
2           established by section 511 of the Clean Energy In-  
3           novation and Deployment Act of 2021; and

4           “(7) labor organizations, such as those rep-  
5           resenting workers in the construction, manufac-  
6           turing, or energy sectors.

7           “(d) TECHNICAL ASSISTANCE.—Upon request of the  
8           Governor of a State, the Secretary shall provide informa-  
9           tion and technical assistance in the development, imple-  
10          mentation, or revision of a State energy plan.”.

11 **SEC. 502. AUTHORIZATION OF APPROPRIATIONS.**

12          (a) STATE ENERGY CONSERVATION PLANS.—Section  
13          365(f) of the Energy Policy and Conservation Act (42  
14          U.S.C. 6325(f)) is amended to read as follows:

15          “(f) AUTHORIZATION OF APPROPRIATIONS.—

16                 “(1) STATE ENERGY CONSERVATION PLANS.—  
17                 For the purpose of carrying out this part, there is  
18                 authorized to be appropriated \$100,000,000 for each  
19                 of fiscal years 2022 through 2026.

20                 “(2) STATE ENERGY PLANS.—In addition to  
21                 the amounts authorized under paragraph (1), for the  
22                 purpose of carrying out section 367, there is author-  
23                 ized to be appropriated \$25,000,000 for each of fis-  
24                 cal years 2022 through 2026.”.

1 (b) TRANSPORTATION ELECTRIFICATION.—Section  
2 131 of the Energy Independence and Security Act of 2007  
3 (42 U.S.C. 17011) is amended—

4 (1) in subsection (b)(6), by striking “2008  
5 through 2012” and inserting “2022 through 2026”;  
6 and

7 (2) in subsection (c)(4), by striking “2008  
8 through 2013” and inserting “2022 through 2026”.

9 **Subtitle B—Energy Workforce**  
10 **Transition**

11 **SEC. 511. ENERGY WORKFORCE TRANSITION OFFICE AND**  
12 **ADVISORY COMMITTEE.**

13 (a) ESTABLISHMENT.—There is hereby established  
14 within the Department of Energy an office, to be known  
15 as the Energy Workforce Transition Office.

16 (b) EXEMPTION FROM REORGANIZATION.—The Of-  
17 fice shall be exempt from the reorganization authority pro-  
18 vided under section 643 of the Department of Energy Or-  
19 ganization Act (42 U.S.C. 7253).

20 (c) DIRECTOR.—The Secretary shall appoint as the  
21 head of the Office a Director, who shall manage the oper-  
22 ations of the Office.

23 (d) DUTIES OF THE OFFICE.—The duties of the Of-  
24 fice shall be to—

1           (1) identify or estimate, to the extent prac-  
2           ticable, with respect to the period that begins on the  
3           date of enactment of this Act and ends on January  
4           1, 2030—

5                   (A) the timing and location of facility clo-  
6                   sures and job terminations or layoffs in energy-  
7                   related facilities, energy-related industrial facili-  
8                   ties, and other energy-related entities; and

9                   (B) the impact of such terminations, lay-  
10                  offs, or reduced work hours on affected workers  
11                  (including those employed by a contractor or  
12                  subcontractor), businesses, and energy transi-  
13                  tion communities; and

14           (2) provide administrative, logistical, research,  
15           and policy support and recommendations to the Ad-  
16           visory Committee.

17           (e) ENERGY WORKFORCE TRANSITION ADVISORY  
18           COMMITTEE.—

19                   (1) ESTABLISHMENT.—There is hereby estab-  
20                   lished an advisory committee, to be known as the  
21                   Energy Workforce Transition Advisory Committee.

22                   (2) ENERGY WORKFORCE TRANSITION PLAN.—

23                           (A) IN GENERAL.—The Advisory Com-  
24                           mittee shall develop and finalize a plan, to be

1 known as the Energy Workforce Transition  
2 Plan.

3 (B) PURPOSE.—The purpose of the En-  
4 ergy Workforce Transition Plan is to identify,  
5 align, and streamline resources to assist work-  
6 ers and communities impacted by the transition  
7 to a clean energy economy.

8 (C) PUBLIC MEETINGS.—In developing the  
9 Energy Workforce Transition Plan, the Advi-  
10 sory Committee shall hold no less than 4 public  
11 meetings in energy transition communities, with  
12 opportunities for members of the public to pro-  
13 vide input.

14 (D) CONTENTS.—The Energy Workforce  
15 Transition Plan shall include—

16 (i) a description of the challenges that  
17 energy transition communities encounter,  
18 including challenges associated with eco-  
19 nomic and employment transition, and  
20 challenges particular to certain regions;

21 (ii) a description of benefits, grants,  
22 and other sources of funding to address  
23 the challenges described under clause (i)  
24 that may be accessed from Federal, State,

1 local, and other sources without additional  
2 legislative authority or approval;

3 (iii) a description of sources of fund-  
4 ing to address the challenges described  
5 under clause (i) that require additional leg-  
6 islative authority or approval;

7 (iv) recommendations for aligning  
8 local, State, Federal, and other resources  
9 to invest in energy transition communities  
10 and energy transition workers;

11 (v) recommendations for establishing  
12 benefits for energy transition workers, in-  
13 cluding consideration of—

14 (I) benefits similar in type,  
15 amount, and duration to Federal ben-  
16 efits that are not otherwise available  
17 to all energy transition workers, in-  
18 cluding pensions;

19 (II) wage differential benefits for  
20 energy transition workers, including  
21 consideration of eligibility and the du-  
22 ration of the benefits; and

23 (III) collaboration with existing  
24 or future employers of energy transi-  
25 tion workers and relevant labor orga-



1 nizations, to inform energy transition  
2 workers how to apply for wage dif-  
3 ferential and other eligible benefits;

4 (vi) recommendations for grants and  
5 other programmatic support for energy  
6 transition communities, and entities that  
7 support energy transition communities, in-  
8 cluding—

9 (I) grants and other pro-  
10 grammatic support provided by coun-  
11 ties, municipalities, cities, or other po-  
12 litical subdivisions of a State;

13 (II) grants and other pro-  
14 grammatic support provided Indian  
15 Tribes;

16 (III) apprenticeships programs;

17 (IV) grants and other pro-  
18 grammatic support to be provided by  
19 institutions of higher education; and

20 (V) grants and other pro-  
21 grammatic support to be provided by  
22 public or private nonprofit organiza-  
23 tions or associations;

24 (vii) recommendations for establishing  
25 community transition resource centers in

1 energy transition communities, in order to  
2 provide such communities a source of cur-  
3 rent information regarding the resources  
4 described in this subparagraph;

5 (viii) identification of the projected  
6 short-term and long-term costs of each ac-  
7 tivity recommended in the Energy Work-  
8 force Transition Plan, including worker  
9 benefits, grant programs, and other activi-  
10 ties;

11 (ix) identification of the potential  
12 sources for sustainable short-term and  
13 long-term funding for implementing the ac-  
14 tivities recommended in the Energy Work-  
15 force Transition Plan;

16 (x) the potential advantages or dis-  
17 advantages of extending activities rec-  
18 ommended in the Energy Workforce Tran-  
19 sition Plan to other sectors and industries  
20 affected by similar economic disruptions;  
21 and

22 (xi) recommendations, made in con-  
23 sultation with relevant Federal agencies,  
24 including the Department of Labor, and  
25 relevant State authorities, for efficient im-

1           plementation of the activities recommended  
2           in the Energy Workforce Transition Plan.

3           (E) REPORT TO CONGRESS.—Not later  
4           than January 1, 2023, the Advisory Committee  
5           shall submit to Congress the Energy Workforce  
6           Transition Plan, as well as any recommenda-  
7           tions to be considered in order to better achieve  
8           the plan.

9           (3) MEMBERSHIP.—The Advisory Committee  
10          shall consist of the following members:

11           (A) Ex officio members as follows:

12           (i) A representative of the Depart-  
13           ment of Labor.

14           (ii) A representative of the Economic  
15           Development Administration of the De-  
16           partment of Commerce.

17           (iii) A representative of the Executive  
18           Office of the President.

19           (B) The following members appointed by  
20          the Director:

21           (i) 4 representatives of energy transi-  
22           tion workers, including at least one from a  
23           union representing coal workers, one from  
24           a building trades union, and one from a

1 union representing other energy transition  
2 workers.

3 (ii) 3 representatives from energy  
4 transition communities.

5 (iii) 2 representatives with profes-  
6 sional economic development or workforce  
7 retraining experience.

8 (iv) 2 representatives of environmental  
9 justice communities.

10 (v) 2 representatives of electric utili-  
11 ties that, on the date of enactment of this  
12 Act, operate a energy-related facility.

13 (4) TERM.—Except as otherwise provided in  
14 this section, the term of appointment or designation  
15 of a member of the Advisory Committee shall end on  
16 January 1, 2027.

17 (5) EXPENSES.—In accordance with section  
18 5703 of title 5, United States Code, each member of  
19 the Advisory Committee may receive payment of a  
20 per diem and reimbursement for actual and nec-  
21 essary expenses.

22 (6) CHAIR.—The Advisory Committee shall  
23 elect a chair from among its members to serve for  
24 a term not to exceed 2 years, as determined appro-  
25 priate by the Advisory Committee.

1           (7) MEETINGS.—The Advisory Committee shall  
2 meet at least once every quarter. The chair of the  
3 Advisory Committee may call such additional meet-  
4 ings as are necessary for the Advisory Committee,  
5 with the Secretary, to develop and submit to Con-  
6 gress the Energy Workforce Transition Plan.

7           (8) ENGAGEMENT OF OTHERS.—The Advisory  
8 Committee may engage additional nonvoting mem-  
9 bers or advisors to provide additional expertise as  
10 needed.

11           (9) TERMINATION.—Section 14(a) of the Fed-  
12 eral Advisory Committee Act shall not apply to the  
13 Advisory Committee.

14 **SEC. 512. ENERGY WORKFORCE TRANSITION PLANS AND**  
15 **REEMPLOYMENT OF AFFECTED WORKERS.**

16           (a) SUBMISSION.—The owner or operator of an en-  
17 ergy-related facility shall to the extent practicable submit  
18 to the Director a workforce transition plan—

19           (1) with respect to a coal-fueled electric gener-  
20 ating facility with a capacity of more than 50  
21 megawatts, not later than 6 months before the clo-  
22 sure of the facility;

23           (2) with respect to a coal mine with a capacity  
24 of more than 4,000,000 short tons of coal per year,

1 not later than 6 months before the closure of the  
2 coal mine; and

3 (3) with respect to an energy-related facility not  
4 described under paragraph (1) or (2), not later than  
5 90 days before the closure of the facility.

6 (b) CONTENTS.—To the extent practicable, a work-  
7 force transition plan submitted under subsection (a) shall  
8 include estimates of—

9 (1) the number of workers, including those em-  
10 ployed by a contractor or subcontractor, employed  
11 by the energy-related facility before the closure of  
12 the facility;

13 (2) the total number of such workers, including  
14 those employed by a contractor or subcontractor,  
15 whose employment, as a result of the closure of the  
16 energy-related facility, will—

17 (A) be retained;

18 (B) be eliminated; and

19 (C) be given a reduction in hours;

20 (3) with respect to the workers, including those  
21 employed by a contractor or subcontractor, whose  
22 existing jobs will be eliminated as a result of the clo-  
23 sure of the energy-related facility the total number,  
24 and the number by job classification, of workers—

1 (A) whose employment will end without  
2 being offered other employment;

3 (B) who will retire as planned, be offered  
4 early retirement, or leave on their own;

5 (C) who will be retained by being trans-  
6 ferred to other activities under the employment  
7 of the owner or operator; and

8 (D) who will be retained to continue to  
9 work for the owner or operator in a new job  
10 classification; and

11 (4) with respect to the workers, including those  
12 employed by a contractor or subcontractor, whose  
13 existing jobs will be retained during the closure of  
14 the energy-related facility, the total number, and the  
15 number by job classification, of workers who will  
16 work on the decommissioning and environmental re-  
17 mediation of the facility; and

18 (5) if an owner or operator is replacing a en-  
19 ergy-related facility with a new electric generating  
20 facility, the number of—

21 (A) workers from the closed energy-related  
22 facility who will be employed at the new electric  
23 generating facility; and

1 (B) jobs at the new electric generating fa-  
2 cility that will be outsourced to contractors or  
3 subcontractors.

4 (c) PRIVACY.—A workforce transition plan submitted  
5 under subsection (a) shall not include information that  
6 violates privacy of workers or confidential business infor-  
7 mation.

8 (d) REGULATIONS.—Not later than 1 year after the  
9 date of enactment of this Act, the Secretary shall promul-  
10 gate regulations to implement this subtitle.

11 (e) COMPLIANCE.—The owner or operator of an en-  
12 ergy-related facility shall face a fine or fee, as determined  
13 appropriate by the Secretary, should they fail to submit  
14 a workforce transition plan in accordance with this sec-  
15 tion.

## 16 **Subtitle C—Modern Energy** 17 **Workforce Development**

### 18 **PART 1—MODERN ENERGY WORKFORCE**

#### 19 **DEVELOPMENT**

#### 20 **SEC. 521. MODERN ENERGY WORKFORCE DEVELOPMENT.**

21 (a) ESTABLISHMENT.—The Secretary, in consulta-  
22 tion with the Secretary of Labor, shall establish and carry  
23 out a comprehensive and nationwide program (referred to  
24 in this section as the “Program”) to improve education  
25 and training for jobs in energy-related industries (includ-



1 ing manufacturing, engineering, construction, and retro-  
2 fitting jobs in energy-related industries) to increase the  
3 number of skilled workers trained to work in energy-re-  
4 lated industries with existing or expected worker short-  
5 ages.

6 (b) WORKFORCE DEVELOPMENT.—

7 (1) IN GENERAL.—In carrying out the Pro-  
8 gram, the Secretary shall—

9 (A) offer available resources to energy  
10 transition workers and underrepresented  
11 groups, including religious and ethnic minori-  
12 ties, women, veterans, individuals with disabil-  
13 ities, and socioeconomically disadvantaged indi-  
14 viduals, to enter into science, technology, engi-  
15 neering, and mathematics fields;

16 (B) offer available resources to institutions  
17 of higher education to equip students with the  
18 skills, training, and technical expertise nec-  
19 essary to fill existing or expected worker short-  
20 ages in energy-related industries;

21 (C) provide internships, fellowships, and  
22 traineeships at the Department of Energy, in-  
23 cluding at National Laboratories;

24 (D) provide energy workforce-related re-  
25 search grants and technical assistance to insti-

1           tutions of higher education, with priority given  
2           to minority institutions;

3           (E) ensure that internships, fellowships,  
4           traineeships, apprenticeships, and pre-appren-  
5           ticeships provide the necessary skills and certifi-  
6           cations for employment in energy-related indus-  
7           tries with existing or expected worker short-  
8           ages;

9           (F) ensure alignment with the goals de-  
10          fined under the Minorities in Energy Initiative  
11          of the Department of Energy;

12          (G) ensure alignment with other programs  
13          that are carrying out the Minorities in Energy  
14          Initiative of the Department of Energy;

15          (H) to the maximum extent practicable,  
16          collaborate with and support State workforce  
17          development programs to maximize the effi-  
18          ciency of the Program; and

19          (I) work with labor organizations and insti-  
20          tutions of higher education to promote pre-ap-  
21          prenticeship as a pathway to an energy-related  
22          career through an apprenticeship program.

23          (2) PRIORITY.—In carrying out the Program,  
24          the Secretary shall—

1 (A) prioritize the education and training of  
2 energy transition workers and underrepresented  
3 groups, including religious and ethnic minori-  
4 ties, women, veterans, individuals with disabil-  
5 ities, and socioeconomically disadvantaged indi-  
6 viduals for jobs in energy-related industries, es-  
7 pecially construction; and

8 (B) partner with labor organizations that  
9 have multi-year records of training and sup-  
10 porting energy transition workers and under-  
11 represented groups to successful completion of  
12 pre-apprenticeship and apprenticeship pro-  
13 grams.

14 (c) DIRECT ASSISTANCE.—

15 (1) IN GENERAL.—In carrying out the Pro-  
16 gram, the Secretary shall provide direct assistance  
17 (including financial assistance awards, technical ex-  
18 pertise, and guidance) to local educational agencies,  
19 local workforce development boards, institutions of  
20 higher education, nonprofit organizations, labor or-  
21 ganizations, apprenticeship programs, and pre-ap-  
22 prenticeship programs.

23 (2) DISTRIBUTION.—The Secretary shall dis-  
24 tribute direct assistance under paragraph (1) in a  
25 manner that—

1 (A) is reflective of the needs of, and de-  
2 mand for jobs in, an energy-related industry;  
3 and

4 (B) is consistent with the information ob-  
5 tained under subsections (e)(4) and (j).

6 (3) RESTRICTION.—In providing financial as-  
7 sistance awards under paragraph (1) for education  
8 and training relating to construction, eligible entities  
9 shall only include apprenticeship programs, and pre-  
10 apprenticeship programs that have an articulation  
11 agreement with one or more apprenticeship pro-  
12 grams.

13 (d) RESOURCE CENTER.—The Secretary shall estab-  
14 lish an online resource center—

15 (1) to maintain and update information and re-  
16 sources on training programs for jobs in energy-re-  
17 lated industries (including manufacturing, engineer-  
18 ing, construction, and retrofitting jobs in energy-re-  
19 lated industries); and

20 (2) to connect local educational agencies, State  
21 educational agencies, institutions of higher edu-  
22 cation, local workforce development boards, State  
23 workforce development boards, nonprofit organiza-  
24 tions, labor organizations, apprenticeship programs  
25 and pre-apprenticeship programs that are working to

1       develop and implement training programs for the  
2       jobs described in paragraph (1) to share resources,  
3       approaches, and best practices.

4       (e) COLLABORATION AND REPORT.—In carrying out  
5 the Program, the Secretary shall—

6           (1) collaborate with local educational agencies,  
7       institutions of higher education, local workforce de-  
8       velopment boards, Tribal or indigenous community  
9       leadership, nonprofit organizations, labor organiza-  
10      tions, apprenticeship programs and pre-apprentice-  
11      ship programs, and energy-related industries;

12          (2) facilitate the sharing of best practices and  
13      approaches that best suit local, State, and national  
14      needs;

15          (3) encourage and foster collaboration,  
16      mentorship, and partnership between—

17            (A) industry partners, local workforce de-  
18      velopment boards, Tribal or indigenous commu-  
19      nity leadership, nonprofit organizations, labor  
20      organizations, apprenticeship and pre-appren-  
21      ticeship programs, that provide effective train-  
22      ing programs for jobs in energy-related indus-  
23      tries; and

24            (B) local educational agencies, State edu-  
25      cational agencies, and institutions of higher

1 education that seek to establish those programs;  
2 and

3 (4) collaborate with the Secretary of Labor, the  
4 Commissioner of the Bureau of Labor Statistics, the  
5 Secretary of Commerce, the Director of the Bureau  
6 of the Census, labor organizations, and energy-re-  
7 lated industries—

8 (A) to develop a comprehensive and de-  
9 tailed understanding of the workforce needs of,  
10 and job opportunities in, energy-related indus-  
11 tries, by State and by region; and

12 (B) to publish an annual report on job cre-  
13 ation in the sectors of energy-related industries  
14 identified under subsection (j).

15 (f) BEST PRACTICES FOR EDUCATIONAL INSTITU-  
16 TIONS.—

17 (1) IN GENERAL.—The Secretary, in collabora-  
18 tion with the Secretary of Education, the Secretary  
19 of Commerce, the Secretary of Labor, and the Direc-  
20 tor of the National Science Foundation, shall de-  
21 velop and report best practices for providing stu-  
22 dents with skills necessary for jobs in energy-related  
23 industries (including manufacturing, engineering,  
24 construction, and retrofitting jobs in energy-related

1 industries) to local educational agencies, institutions  
2 of higher education, and apprenticeship programs.

3 (2) ENERGY EFFICIENCY AND COMMUNITY EN-  
4 ERGY RESILIENCY INITIATIVES.—The Secretary  
5 shall develop and provide best practices for teaching  
6 students and the families of those students about en-  
7 ergy efficiency and community energy resiliency.

8 (3) INPUT FROM INDUSTRY LABOR ORGANIZA-  
9 TIONS.—In carrying out paragraphs (1) and (2), the  
10 Secretary shall solicit input from energy-related in-  
11 dustries and labor organizations, especially sectors  
12 with existing or expected worker shortages or exper-  
13 tise in energy efficiency.

14 (4) STEM EDUCATION.—In carrying out para-  
15 graphs (1) and (2), the Secretary shall promote edu-  
16 cation in science, technology, engineering, and math-  
17 ematics.

18 (g) OUTREACH TO MINORITY INSTITUTIONS.—In  
19 carrying out the Program, the Secretary shall—

20 (1) increase the Department of Energy’s out-  
21 reach to minority institutions, including historically  
22 Black universities and colleges, community colleges,  
23 and Tribal institutions;

24 (2) work with minority institutions to increase  
25 the number of skilled minorities and women quali-

1       fied for jobs in energy-related industries (including  
2       manufacturing, engineering, construction, and retro-  
3       fitting jobs in energy-related industries);

4           (3) work with energy-related industries to im-  
5       prove opportunities for students of minority institu-  
6       tions to participate in industry internships and coop-  
7       erative work-study programs; and

8           (4) work with the Directors of the National  
9       Laboratories to increase the participation of stu-  
10      dents from minority institutions in internships, fel-  
11      lowships, training programs, and employment at  
12      those laboratories.

13      (h) OUTREACH TO ENERGY TRANSITION WORK-  
14      ERS.—The Secretary shall—

15           (1) work with employers and job trainers, in-  
16      cluding apprenticeship and pre-apprenticeship pro-  
17      grams, in preparing energy transition workers for  
18      emerging jobs in energy-related industries (including  
19      manufacturing, engineering, construction, and retro-  
20      fitting jobs in energy-related industries);

21           (2) work with energy transition workers to in-  
22      crease the number of individuals trained for jobs in  
23      energy-related industries (including manufacturing,  
24      engineering, construction, and retrofitting jobs in  
25      energy-related industries); and



1           (3) work with labor organizations and energy-  
2           related industry partners to improve opportunities  
3           for energy transition workers to participate in indus-  
4           try internships, cooperative work-study programs,  
5           apprenticeships, and pre-apprenticeships.

6           (i) ENROLLMENT IN TRAINING AND APPRENTICE-  
7           SHIP AND PRE-APPRENTICESHIP PROGRAMS.—The Sec-  
8           retary shall provide assistance to industry, local workforce  
9           development boards, State workforce development boards,  
10          nonprofit organizations, labor organizations, and appren-  
11          ticeship programs in identifying students and other can-  
12          didates, including energy transition workers and underrep-  
13          resented groups, including religious and ethnic minorities,  
14          women, veterans, individuals with disabilities, and  
15          socioeconomically disadvantaged individuals, to enroll in  
16          training and apprenticeship programs and pre-apprentice-  
17          ship programs for jobs in energy-related industries.

18          (j) GUIDELINES TO DEVELOP SKILLS FOR A MOD-  
19          ERN ENERGY INDUSTRY WORKFORCE.—The Secretary  
20          shall, in collaboration with energy-related industries and  
21          labor organizations, identify the sectors within each en-  
22          ergy-related industry that have the greatest demand for  
23          workers and develop guidelines for the skills necessary to  
24          work in those sectors. The Secretary shall identify the sec-  
25          tors in consultation with a broad cross-section of the en-

1 ergy industry, including relevant energy industry organi-  
2 zations, public and private employers, labor organizations,  
3 postsecondary education institutions, and workforce devel-  
4 opment boards.

5 (k) RULE OF CONSTRUCTION.—Nothing in this sec-  
6 tion authorizes any department, agency, officer, or em-  
7 ployee of the Federal Government to exercise any direc-  
8 tion, supervision, or control over—

9 (1) the curriculum, program of instruction, or  
10 instructional content of any State, local educational  
11 agency, or school; or

12 (2) the selection of library resources, textbooks,  
13 or other printed or published instructional materials  
14 used by any State, local educational agency, or  
15 school.

16 **SEC. 522. CLEAN ENERGY JOBS TRAINING PROGRAM.**

17 (a) DEFINITIONS.—In this section:

18 (1) ELIGIBLE ENTITY.—The term “eligible enti-  
19 ty” means a National Laboratory, business, or labor  
20 organization that demonstrates success in placing  
21 graduates of pre-apprenticeship or apprenticeship  
22 programs in jobs relevant to such programs and—

23 (A) is directly involved with zero-emission  
24 electricity technology, energy efficiency, or other  
25 activity that results in a reduction in green-

1 house gas emissions, as determined by the Sec-  
2 retary;

3 (B) works on behalf of a business or labor  
4 organization that is directly involved with zero-  
5 emission electricity technology, energy effi-  
6 ciency, or other activity that results in a reduc-  
7 tion in greenhouse gas emissions, as determined  
8 by the Secretary;

9 (C) provides services related to—

10 (i) zero-emission electricity technology  
11 deployment and maintenance and energy  
12 efficiency;

13 (ii) grid modernization; or

14 (iii) reduction in greenhouse gas emis-  
15 sions through the use of zero-emission en-  
16 ergy technologies;

17 (D) has knowledge of technician workforce  
18 needs of a National Laboratory or covered facil-  
19 ity of the National Nuclear Security Adminis-  
20 tration and the associated security requirements  
21 of such laboratory or facility;

22 (E) demonstrates experience in imple-  
23 menting and operating apprenticeship programs  
24 or pre-apprenticeship programs that provide a  
25 direct pathway to an energy-related career; or

1 (F) demonstrates success in placing grad-  
2 uates of pre-apprenticeship or apprenticeship  
3 programs in jobs relevant to such programs.

4 (2) NATIONAL LABORATORY.—The term “Na-  
5 tional Laboratory” means any of the following lab-  
6 oratories owned by the Department of Energy:

7 (A) Ames Laboratory.

8 (B) Argonne National Laboratory.

9 (C) Brookhaven National Laboratory.

10 (D) Fermi National Accelerator Labora-  
11 tory.

12 (E) Idaho National Laboratory.

13 (F) Lawrence Berkeley National Labora-  
14 tory.

15 (G) Lawrence Livermore National Labora-  
16 tory.

17 (H) Los Alamos National Laboratory.

18 (I) National Energy Technology Labora-  
19 tory.

20 (J) National Renewable Energy Labora-  
21 tory.

22 (K) Oak Ridge National Laboratory.

23 (L) Pacific Northwest National Labora-  
24 tory.

25 (M) Princeton Plasma Physics Laboratory.

1 (N) Sandia National Laboratories.

2 (O) Savannah River National Laboratory.

3 (P) Stanford Linear Accelerator Center.

4 (Q) Thomas Jefferson National Accelerator Facility.

6 (3) PROGRAM.—The term “Program” means  
7 the Clean Energy Jobs Training Program established  
8 under subsection (b).

9 (b) ESTABLISHMENT.—The Secretary, in consultation  
10 with the Secretary of Labor, shall establish a program,  
11 to be known as the Clean Energy Jobs Training  
12 Program, to provide competitively awarded cost-shared  
13 grants to eligible entities to pay for on-the-job training  
14 of a new or existing employee—

15 (1) to work in zero-emission electricity generation,  
16 energy efficiency, or grid modernization;

17 (2) to work otherwise on the reduction of greenhouse  
18 gas emissions; or

19 (3) to participate in a pre-apprenticeship program  
20 that provides a direct pathway to an energy-related  
21 career in construction through one or more  
22 apprenticeship programs.

23 (c) GRANTS.—

24 (1) IN GENERAL.—An eligible entity desiring a  
25 grant under the Program shall submit to the Sec-

1       retary an application at such time, in such manner,  
2       and containing such information as the Secretary  
3       may require.

4               (2) PRIORITY FOR TARGETED COMMUNITIES.—

5       In providing grants under the Program, the Sec-  
6       retary shall give priority to an eligible entity that—

7               (A) recruits employees—

8                       (i) from the one or more communities  
9                       that are served by the eligible entity; and

10                      (ii) that are minorities, women, vet-  
11                      erans, individuals from Indian Tribes or  
12                      Tribal organizations, or energy transition  
13                      workers;

14               (B) provides trainees with the opportunity  
15       to obtain real-world experience;

16               (C) has fewer than 100 employees; and

17               (D) in the case of a pre-apprenticeship  
18       program, demonstrates—

19                      (i) a multi-year record of successfully  
20                      recruiting energy transition workers, mi-  
21                      norities, women, and veterans for training  
22                      and supporting such individuals to a suc-  
23                      cessful completion of a pre-apprenticeship  
24                      program; and

1           (ii) a successful multi-year record of  
2           placing the majority of pre-apprenticeship  
3           program graduates into apprenticeship  
4           programs in the construction industry.

5           (3) USE OF GRANT FOR FEDERAL SHARE.—

6           (A) IN GENERAL.—An eligible entity shall  
7           use a grant received under the Program to—

8                   (i) pay the Federal share of the cost  
9                   of providing on-the-job training for an em-  
10                  ployee, in accordance with subparagraph  
11                  (B); or

12                  (ii) in the case of a pre-apprenticeship  
13                  program—

14                           (I) recruit minorities, women,  
15                           and veterans for training;

16                           (II) support those individuals in  
17                           the successful completion of the pre-  
18                           apprenticeship program; and

19                           (III) carry out any other activity  
20                           of the pre-apprenticeship program, as  
21                           determined to be appropriate by the  
22                           Secretary of Labor, in consultation  
23                           with the Secretary.

1 (B) FEDERAL SHARE AMOUNT.—The Fed-  
2 eral share described in subparagraph (A)(i)  
3 shall not exceed—

4 (i) in the case of an eligible entity  
5 with 20 or fewer employees, 45 percent of  
6 the cost of on-the-job training for an em-  
7 ployee;

8 (ii) in the case of an eligible entity  
9 with not fewer than 21 employees and not  
10 more than 99 employees, 37.5 percent of  
11 the cost of on-the-job training for an em-  
12 ployee;

13 (iii) in the case of an eligible entity  
14 with not fewer than 100 employees, 25  
15 percent of the cost of on-the-job training  
16 for an employee; and

17 (iv) in the case of an eligible entity  
18 that administers a pre-apprenticeship pro-  
19 gram, 75 percent of the cost of the pre-ap-  
20 prenticeship program.

21 (4) EMPLOYER PAYMENT OF NON-FEDERAL  
22 SHARE.—

23 (A) IN GENERAL.—The non-Federal share  
24 of the cost of providing on-the-job training for  
25 an employee under a grant received under the



1 Program shall be paid in cash or in kind by the  
2 employer of the employee receiving the training  
3 or by a nonprofit organization.

4 (B) INCLUSIONS.—The non-Federal share  
5 described in subparagraph (A) may include the  
6 amount of wages paid by the employer to the  
7 employee during the time that the employee is  
8 receiving on-the-job training, as fairly evaluated  
9 by the Secretary of Labor.

10 (5) CONSTRUCTION.—In providing grants under  
11 the Program for training, recruitment, and support  
12 relating to construction, eligible entities shall only  
13 include pre-apprenticeship programs that have an  
14 articulation agreement with one or more apprentice-  
15 ship programs.

16 (6) GRANT AMOUNT.—An eligible entity may  
17 not receive more than \$1,000,000 per fiscal year in  
18 grant funds under the Program.

19 **SEC. 523. UNIVERSITY ZERO-EMISSION ENERGY LEADER-**  
20 **SHIP PROGRAM.**

21 (a) ESTABLISHMENT.—

22 (1) IN GENERAL.—Subtitle E of title IX of the  
23 Energy Policy Act of 2005 is amended by adding at  
24 the end the following:

1 **“SEC. 959D. UNIVERSITY ZERO-EMISSION ENERGY LEADER-**  
2 **SHIP PROGRAM.**

3 “(a) ESTABLISHMENT.—The Secretary of Energy  
4 shall establish a program, to be known as the University  
5 Zero-Emission Energy Leadership Program.

6 “(b) USE OF FUNDS.—Amounts made available to  
7 carry out the University Zero-Emission Energy Leader-  
8 ship Program—

9 “(1) shall be used to provide financial assist-  
10 ance for scholarships, fellowships, and research and  
11 development projects at institutions of higher edu-  
12 cation in areas relevant to departmental missions in  
13 research, development, demonstration, and deploy-  
14 ment activities for zero-emission technologies;

15 “(2) may be used to provide financial assistance  
16 to businesses to offset the costs of a partnership  
17 with, or investments in, institutions of higher edu-  
18 cation in areas relevant to departmental missions in  
19 research, development, demonstration, and deploy-  
20 ment activities for zero-emission technologies; and

21 “(3) may be used to provide financial assistance  
22 for a scholarship, fellowship, or multiyear research  
23 and development project that does not align directly  
24 with a departmental mission, if the activity for  
25 which assistance is provided promotes a zero-emis-  
26 sion energy transition.”.

1           (2) TABLE OF CONTENTS.—The table of con-  
2           tents for the Energy Policy Act of 2005 is further  
3           amended by adding after the item relating to section  
4           959D the following:

“Sec. 959D. University Zero-Emission Energy Leadership Program.”.

5           (b) REPEAL.—The Energy and Water Development  
6           and Related Agencies Appropriations Act, 2009 is amend-  
7           ed by striking section 313.

8           **SEC. 524. AUTHORIZATION OF APPROPRIATIONS.**

9           There are authorized to be appropriated to carry out  
10          this part such sums as may be necessary for each of fiscal  
11          years 2022 through 2035.

12           **PART 2—CLIMATE RESILIENCY CORPS**

13           **SEC. 531. ESTABLISHMENT OF THE CLIMATE RESILIENCY**  
14           **CORPS.**

15          (a) GENERAL AUTHORITY.—The President shall es-  
16          tablish a wholly owned Government corporation, to be  
17          known as the Climate Resiliency Corps, to employ resi-  
18          dents of the United States who are unemployed or under-  
19          employed, in the construction, maintenance, and carrying  
20          out of projects of a public nature in connection with, but  
21          not limited to—

22                  (1) mitigating the effects of disasters and other  
23                  trends related to climate change, including by—

24                          (A) assessing community resilience to the  
25                          impacts of climate change;

1 (B) collecting, monitoring, and analyzing  
2 data related to climate change and disasters;

3 (C) developing a plan to improve commu-  
4 nity resilience to the impacts of climate change  
5 through resilient infrastructure; and

6 (D) building and maintaining resilient in-  
7 frastructure, including by—

8 (i) preserving, protecting, and restor-  
9 ing habitat;

10 (ii) stabilizing shorelines;

11 (iii) removing invasive species and  
12 planting native species of trees, plants and  
13 groundcover;

14 (iv) constructing bioswales and water  
15 bars;

16 (v) improving drainage systems  
17 through use of permeable surfaces and  
18 rain gardens;

19 (vi) removing hazardous fuels;

20 (vii) conducting prescribed burns;

21 (viii) establishing defensible space;

22 (ix) retrofitting buildings; and

23 (x) planting urban forestry, trees, and  
24 landscapes;

1           (2) preparing communities for disasters of a  
2 type projected as a result of climate change, includ-  
3 ing by—

4                   (A) organizing community-based resiliency  
5 coalitions and working groups;

6                   (B) providing disaster preparedness or  
7 community emergency response team training  
8 to community-based organizations and resi-  
9 dents; and

10                  (C) providing education on climate change,  
11 disaster, and resilience at community-based or-  
12 ganizations and schools;

13           (3) responding to disasters, including—

14                   (A) establishing and managing volunteers,  
15 distribution centers, and shelters;

16                   (B) supporting disaster response activities  
17 and centers, including fire camps;

18                   (C) clearing fallen trees and branches;

19                   (D) boarding up windows and doors and  
20 tarping roofs; and

21                   (E) mucking and gutting homes and build-  
22 ings;

23           (4) recovering from disasters, including—

24                   (A) clearing debris;

1 (B) repairing and rebuilding homes and  
2 buildings;

3 (C) replanting native trees and plants;

4 (D) restoring habitat; and

5 (E) stabilizing shoreline and hillsides; and

6 (5) other activities that are determined appro-  
7 priate by the Chief Executive Officer and the Board  
8 of Directors of the Climate Resiliency Corps.

9 (b) ENHANCING CLIMATE RESILIENCY IN DIS-  
10 PROPORTIONATELY IMPACTED COMMUNITIES.—Not less  
11 than 40 percent of the amounts made available for the  
12 Climate Resiliency Corps shall be used to enhance the cli-  
13 mate resiliency of environmental justice communities  
14 through activities described in subsection (a).

15 (c) INCORPORATION.—

16 (1) IN GENERAL.—The Advisory Committee  
17 shall be deemed the incorporator of Climate Resil-  
18 iency Corps, and the incorporation shall be held to  
19 have been effected from the date of the first meeting  
20 of the Advisory Committee.

21 (2) CORPORATE OFFICE.—The Climate Resil-  
22 iency Corps shall—

23 (A) maintain an office in the District of  
24 Columbia; and

1 (B) for purposes of venue in civil actions,  
2 be considered to be a resident of the District of  
3 Columbia.

4 (d) **ROLE OF FEDERAL AGENCIES.**—To operate the  
5 Climate Resiliency Corps, the President may authorize  
6 partnerships with existing Federal departments and agen-  
7 cies, including the Department of Labor, the Department  
8 of Defense, the National Guard Bureau, the Department  
9 of the Interior, the Department of Agriculture, the Army  
10 Corps of Engineers, the Department of Transportation,  
11 the Department of Energy, the Environmental Protection  
12 Agency, and other Federal Governmental corporations.

13 **SEC. 532. BOARD OF DIRECTORS OF THE CLIMATE RESIL-**  
14 **IENCY CORPS.**

15 (a) **VOTING MEMBERSHIP OF THE BOARD OF DIREC-**  
16 **TORS.**—

17 (1) **IN GENERAL.**—The Climate Resiliency  
18 Corps shall have a Board of Directors (hereinafter  
19 referred to as the Board of Directors) consisting  
20 of—

21 (A) 7 voting members appointed by the  
22 President, by and with the advice and consent  
23 of the Senate, not more than 4 of whom shall  
24 be from the same political party; and

1 (B) the chief executive officer of the Cli-  
2 mate Resiliency Corps.

3 (2) CHAIRPERSON.—One of the voting members  
4 of the Board of Directors shall be designated by the  
5 President to serve as Chairperson thereof.

6 (3) CONGRESSIONAL RECOMMENDATIONS.—Not  
7 later than 30 days after the date of enactment of  
8 this Act, the majority leader of the Senate, the mi-  
9 nority leader of the Senate, the Speaker of the  
10 House of Representatives, and the minority leader of  
11 the House of Representatives shall each submit a  
12 recommendation to the President for appointment of  
13 a voting member of the Board of Directors, after  
14 consultation with the appropriate committees of  
15 Congress.

16 (b) POWERS AND DUTIES OF THE BOARD OF DIREC-  
17 TORS.—The Board of Directors shall—

18 (1) as soon as is practicable after the date on  
19 which all members are appointed, approve or dis-  
20 approve senior management appointed by the chief  
21 executive officer;

22 (2) not later than 180 days after the date on  
23 which all members are appointed—

24 (A) develop and approve the bylaws of the  
25 Climate Resiliency Corps, including bylaws for



1 the regulation of the affairs and conduct of the  
2 business of the Climate Resiliency Corps;

3 (B) establish subcommittees, including an  
4 audit committee that is composed solely of  
5 members of the Board of Directors who are  
6 independent of the senior management of the  
7 Corps;

8 (C) develop and approve, in consultation  
9 with senior management, a conflict-of-interest  
10 policy for the Board of Directors and for senior  
11 management;

12 (D) approve or disapprove internal policies  
13 that the chief executive officer shall submit to  
14 the Board of Directors; and

15 (E) approve or disapprove a 1-year busi-  
16 ness plan and budget for the Climate Resiliency  
17 Corps;

18 (3) ensure that the Climate Resiliency Corps is  
19 at all times operated in a manner that is consistent  
20 with this part, by—

21 (A) monitoring and assessing the effective-  
22 ness of the Corps;

23 (B) periodically reviewing internal policies;

24 (C) reviewing and approving annual busi-  
25 ness plans, annual budgets, and long-term

1 strategies submitted by the chief executive offi-  
2 cer;

3 (D) reviewing and approving annual re-  
4 ports submitted by the chief executive officer;

5 (E) engaging one or more external audi-  
6 tors; and

7 (F) reviewing and approving all changes to  
8 the organization of senior management;

9 (4) establish such other criteria, requirements,  
10 or procedures as the Board of Directors may con-  
11 sider to be appropriate in carrying out this part;

12 (5) serve as the primary liaison for the Climate  
13 Resiliency Corps in interactions with Congress, the  
14 executive branch, and State and local governments,  
15 and to represent the Climate Resiliency Corps in  
16 such interactions and others;

17 (6) approve by a vote of 5 of the 7 voting mem-  
18 bers of the Board of Directors any changes to the  
19 bylaws or internal policies of the Climate Resiliency  
20 Corps;

21 (7) have the authority and responsibility—

22 (A) to oversee entering into and carry out  
23 such contracts, leases, cooperative agreements,  
24 or other transactions as are necessary to carry  
25 out this part with—

1 (i) any Federal department or agency;

2 (ii) any State, territory, or Tribe of  
3 the United States; and

4 (iii) any individual, public-private  
5 partnership, firm, association, or corpora-  
6 tion;

7 (B) to approve of the acquisition, lease,  
8 pledge, exchange, and disposal of real and per-  
9 sonal property by the Climate Resiliency Corps  
10 and otherwise approve the exercise by the Cli-  
11 mate Resiliency Corps of all of the usual inci-  
12 dents of ownership of property, to the extent  
13 that the exercise of such powers is appropriate  
14 to and consistent with the purposes of the  
15 Corps;

16 (C) to determine the character of, and the  
17 necessity for, the obligations and expenditures  
18 of the Climate Resiliency Corps, and the man-  
19 ner in which the obligations and expenditures  
20 will be incurred, allowed, and paid, subject to  
21 this part and other Federal law specifically ap-  
22 plicable to wholly owned Federal corporations;

23 (D) to sue or be sued in the corporate ca-  
24 pacity of the Climate Resiliency Corps in any  
25 court of competent jurisdiction; and

1           (E) to review all projects recommended by  
2           the chief executive officer for funding and to  
3           approve, postpone, or deny the same by major-  
4           ity vote; and

5           (8) delegate to the chief executive officer those  
6           duties that the Board of Directors determines appro-  
7           priate.

8           (c) VOTING RIGHTS.—Each voting member of the  
9           Board of Directors shall have an equal vote in all decisions  
10          of the Board of Directors.

11          (d) QUALIFICATIONS OF VOTING MEMBERS.—Each  
12          voting member of the Board of Directors shall—

13               (1) be a citizen of the United States; and

14               (2) have significant demonstrated expertise in—

15                       (A) the management and administration of  
16                       an institution or program relevant to the oper-  
17                       ation of the Climate Resiliency Corps; or

18                       (B) the financing, development, or oper-  
19                       ation of infrastructure projects.

20          (e) TERMS.—

21               (1) IN GENERAL.—Except as otherwise pro-  
22               vided in this part, each voting member of the Board  
23               of Directors shall be appointed for a term of 4 years.

24               (2) INITIAL STAGGERED TERMS.—Of the voting  
25               members first appointed to the Board of Directors—

1           (A) the initial Chairperson and 3 of the  
2           other voting members shall each be appointed  
3           for a term of 4 years; and

4           (B) the remaining 3 voting members shall  
5           each be appointed for a term of 2 years.

6           (3) DATE OF INITIAL NOMINATIONS.—The ini-  
7           tial nominations for the appointment of all voting  
8           members of the Board of Directors shall be made  
9           not later than 60 days after the date of enactment  
10          of this Act.

11          (4) BEGINNING OF TERM.—The term of each of  
12          the initial voting members appointed under this sec-  
13          tion shall commence immediately upon the date of  
14          appointment, except that, for purposes of calculating  
15          the term limits specified in this subsection, the ini-  
16          tial terms shall each be construed as beginning on  
17          January 22 of the year following the date of the ini-  
18          tial appointment.

19          (5) VACANCIES.—A vacancy in the position of  
20          a voting member of the Board of Directors shall be  
21          filled by the President, and a member appointed to  
22          fill a vacancy on the Board of Directors occurring  
23          before the expiration of the term for which the pred-  
24          ecessor was appointed shall be appointed only for  
25          the remainder of that term.

1 (f) MEETINGS.—

2 (1) OPEN TO THE PUBLIC; NOTICE.—Except as  
3 provided in paragraph (3), all meetings of the Board  
4 of Directors shall be—

5 (A) open to the public; and

6 (B) preceded by a public notice of at least  
7 14 days.

8 (2) FREQUENCY.—The Board of Directors shall  
9 meet not later than 60 days after the date on which  
10 all members of the Board of Directors are first ap-  
11 pointed, at least quarterly thereafter, and otherwise  
12 at the call of either the Chairperson or 5 voting  
13 members of the Board of Directors.

14 (3) EXCEPTION FOR CLOSED MEETINGS.—The  
15 voting members of the Board of Directors may, by  
16 majority vote, close a meeting to the public if, dur-  
17 ing the meeting to be closed, there is likely to be dis-  
18 closed proprietary or sensitive information regarding  
19 an infrastructure project under consideration for as-  
20 sistance pursuant to this part. The Board of Direc-  
21 tors shall prepare minutes of any meeting that is  
22 closed to the public, and shall make such minutes  
23 available as soon as practicable, not later than 1  
24 year after the date of the closed meeting, with any

1 necessary redactions to protect any proprietary or  
2 sensitive information.

3 (4) QUORUM.—For purposes of meetings of the  
4 Board of Directors, 5 voting members of the Board  
5 of Directors shall constitute a quorum.

6 (g) COMPENSATION OF MEMBERS.—Each voting  
7 member of the Board of Directors shall be compensated  
8 at a rate equal to the daily equivalent of the annual rate  
9 of basic pay prescribed for level III of the Executive  
10 Schedule under section 5314 of title 5, United States  
11 Code, for each day (including travel time) during which  
12 the member is engaged in the performance of the duties  
13 of the Board of Directors.

14 (h) CONFLICTS OF INTEREST.—A voting member of  
15 the Board of Directors may not participate in any review  
16 or decision affecting a project under consideration under  
17 this part, if the member has or is affiliated with an entity  
18 who has a financial interest in such project.

19 **SEC. 533. CHIEF EXECUTIVE OFFICER OF THE CLIMATE RE-**  
20 **SILIENCY CORPS.**

21 (a) IN GENERAL.—The chief executive officer of the  
22 Climate Resiliency Corps (hereinafter referred to as the  
23 “chief executive officer”) shall be a nonvoting member of  
24 the Board of Directors, who shall be responsible for direct-  
25 ing all activities of the Climate Resiliency Corps, and shall

1 support the Board of Directors as set forth in this part,  
2 as the Board of Directors determines necessary or appro-  
3 priate.

4 (b) APPOINTMENT AND TENURE OF THE CHIEF EX-  
5 ECUTIVE OFFICER.—

6 (1) IN GENERAL.—The President shall appoint  
7 the chief executive officer by and with the advice and  
8 consent of the Senate.

9 (2) TERM.—The chief executive officer shall be  
10 appointed for a term of 6 years.

11 (3) VACANCIES.—Any vacancy in the office of  
12 the chief executive officer shall be filled by the Presi-  
13 dent, and the person appointed to fill a vacancy in  
14 that position occurring before the expiration of the  
15 term for which the predecessor was appointed shall  
16 be appointed only for the remainder of that term.

17 (c) QUALIFICATIONS.—The chief executive officer—

18 (1) shall have significant expertise in the fi-  
19 nancing and development of infrastructure projects;  
20 and

21 (2) may not—

22 (A) hold any other public office;

23 (B) have any financial interest in a project  
24 then being considered by the Board of Direc-



1           tors, unless that interest is placed in a blind  
2           trust; or

3           (C) have any financial interest in an in-  
4           vestment institution or its affiliates or any  
5           other entity seeking or likely to seek financial  
6           assistance for any infrastructure project from  
7           the Climate Resiliency Corps, unless any such  
8           interest is placed in a blind trust for the tenure  
9           of the service of the chief executive officer plus  
10          2 additional years.

11          (d) RESPONSIBILITIES.—The chief executive officer  
12         shall have such executive functions, powers, and duties as  
13         may be prescribed by this part, the bylaws of the Climate  
14         Resiliency Corps, or the Board of Directors, including—

15                 (1) responsibility for the development and im-  
16                 plementation of the strategy of the Climate Resil-  
17                 iency Corps, including—

18                         (A) the development and submission to the  
19                         Board of Directors of the annual business plans  
20                         and budget of the Climate Resiliency Corps;

21                         (B) the development and submission to the  
22                         Board of Directors of a long-term strategic plan  
23                         for the Climate Resiliency Corps; and

24                         (C) the development, revision, and submis-  
25                         sion to the Board of Directors of internal poli-

1           cies of the Climate Resiliency Corps, includ-  
2           ing—

3                   (i) policies regarding the application  
4                   and approval process for projects to be car-  
5                   ried out pursuant to this part, including—

6                           (I) guidelines for the selection  
7                           and approval of projects;

8                           (II) specific criteria for deter-  
9                           mining eligibility for project selection;

10                           and

11                           (III) operational guidelines; and

12                   (ii) the estimated timeline for submis-  
13                   sion, approval, and completion of projects;

14           (2) responsibility for the management and over-  
15           sight of the daily activities, decisions, operations,  
16           and personnel of the Climate Resiliency Corps, in-  
17           cluding—

18                   (A) the appointment of senior manage-  
19                   ment, subject to approval by the voting mem-  
20                   bers of the Board of Directors, and the hiring  
21                   and termination of all other Climate Resiliency  
22                   Corps personnel;

23                   (B) ensuring, in conjunction with the gen-  
24                   eral counsel, that all activities of the Climate

1 Resiliency Corps are carried out in compliance  
2 with applicable law;

3 (C) overseeing the involvement of the Cli-  
4 mate Resiliency Corps in all projects, includ-  
5 ing—

6 (i) developing eligible projects;

7 (ii) determining the terms and condi-  
8 tions of all infrastructure projects;

9 (iii) monitoring all infrastructure  
10 projects;

11 (iv) preparing and submitting for ap-  
12 proval by the Board of Directors the docu-  
13 ments required under paragraph (1); and

14 (v) ensuring the implementation of de-  
15 cisions of the Board of Directors; and

16 (D) such other activities as may be nec-  
17 essary or appropriate in carrying out this part.

18 (e) COMPENSATION.—

19 (1) IN GENERAL.—Any compensation assess-  
20 ment or recommendation by the chief executive offi-  
21 cer under this section shall be without regard to the  
22 provisions of chapter 51 or subchapter III of chapter  
23 53 of title 5, United States Code.

24 (2) CONSIDERATIONS.—The compensation as-  
25 sessment or recommendation required under this

1 subsection shall take into account merit principles,  
2 where applicable, as well as the education, experi-  
3 ence, level of responsibility, geographic differences,  
4 and retention and recruitment needs in determining  
5 compensation of personnel.

6 **SEC. 534. SENIOR MANAGEMENT.**

7 (a) APPOINTMENT OF SENIOR MANAGEMENT.—The  
8 chief executive officer shall appoint such senior managers  
9 as are necessary to support the chief executive officer in  
10 the discharge of the responsibilities of the chief executive  
11 officer, as approved by a majority vote of the voting mem-  
12 bers of the Board of Directors.

13 (b) REMOVAL OF SENIOR MANAGEMENT.—Any mem-  
14 ber of senior management may be removed, either by a  
15 majority of the voting members of the Board of Directors  
16 upon request by the chief executive officer, or otherwise  
17 by vote of not fewer than 5 voting members of the Board  
18 of Directors.

19 (c) SENIOR MANAGEMENT.—

20 (1) IN GENERAL.—Each member of senior  
21 management shall report directly to the chief execu-  
22 tive officer.

23 (2) DUTIES AND RESPONSIBILITIES.—

24 (A) CHIEF FINANCIAL OFFICER.—The  
25 chief financial officer shall be responsible for all

1 financial functions of the Corps, provided that,  
2 at the discretion of the Board of Directors, spe-  
3 cific functions of the chief financial officer may  
4 be delegated externally.

5 (B) CHIEF COMPLIANCE OFFICER.—The  
6 chief compliance officer shall be responsible for  
7 all functions of the Corps relating to internal  
8 audits, accounting safeguards, and the enforce-  
9 ment of such safeguards and other applicable  
10 requirements.

11 (C) GENERAL COUNSEL.—The general  
12 counsel shall be responsible for all functions of  
13 the Corps relating to legal matters and, in con-  
14 sultation with the chief executive officer, shall  
15 be responsible for ensuring that the Corps com-  
16 plies with all applicable law.

17 (D) CHIEF OPERATIONS OFFICER.—The  
18 chief operations officer shall be responsible for  
19 all operational functions of the Corps, including  
20 those relating to the continuing operations and  
21 performance of all infrastructure projects.

22 (d) CONFLICTS OF INTEREST.—No individual ap-  
23 pointed to senior management may—

24 (1) hold any other public office; or

1           (2) have any financial interest in a project  
2           being considered by the Board of Directors, unless  
3           that interest is placed in a blind trust.

4 **SEC. 535. GENERAL EMPLOYMENT WITHIN THE CLIMATE**  
5 **RESILIENCY CORPS.**

6           (a) **EMPLOYMENT PREFERENCE.**—If the President  
7 determines that amounts appropriated to carry out the  
8 Climate Resiliency Corps for a fiscal year will be insuffi-  
9 cient to employ all of the citizens of the United States  
10 who are seeking or likely to seek employment in the Cli-  
11 mate Resiliency Corps, and to continue the employment  
12 of current employees who desire to remain in the Climate  
13 Resiliency Corps, the President shall give priority to the  
14 hiring of additional persons in the Climate Resiliency  
15 Corps to—

16           (1) energy transition workers;

17           (2) unemployed veterans of the Armed Forces  
18 and unemployed members of the reserve components  
19 of the Armed Forces;

20           (3) unemployed citizens who have exhausted  
21 their entitlement to unemployment compensation;

22           (4) unemployed citizens, who immediately be-  
23 fore employment in the Climate Resiliency Corps,  
24 are eligible for unemployment compensation payable  
25 under any State law or Federal unemployment com-

1       pensation law, including any additional compensa-  
2       tion or extended compensation under such laws; and

3           (5) other citizens from minority groups, includ-  
4       ing, religious and ethnic minorities, women, and in-  
5       dividuals with disabilities.

6       (b) HOUSING AND CARE OF EMPLOYEES.—The Cli-  
7       mate Resiliency Corps may provide housing for persons  
8       employed and furnish them with such subsistence, cloth-  
9       ing, medical attendance and hospitalization, and cash al-  
10      lowance, as may be necessary during the duration of em-  
11      ployment.

12      (c) TRANSPORTATION.—The Climate Resiliency  
13      Corps may provide for the transportation of persons em-  
14      ployed to and from the places of employment.

15      **SEC. 536. PROJECT APPLICATIONS.**

16      To be eligible for a project to be completed by the  
17      Climate Resiliency Corps under this part, an entity shall  
18      submit directly to the chief executive officer an application  
19      in such manner and containing such information as the  
20      chief executive officer may require.

21      **SEC. 537. FUNDING.**

22      There is authorized to be appropriated to carry out  
23      this part \$10,000,000,000, to remain available until ex-  
24      pended.

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