

117TH CONGRESS
1ST SESSION

S. _____

To invest in the energy and outdoor infrastructure of the United States to deploy new and innovative technologies, update existing infrastructure to be reliable and resilient, and secure energy infrastructure against physical and cyber threats, and for other purposes.

IN THE SENATE OF THE UNITED STATES

_____ introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To invest in the energy and outdoor infrastructure of the United States to deploy new and innovative technologies, update existing infrastructure to be reliable and resilient, and secure energy infrastructure against physical and cyber threats, 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 **["Energy Infrastructure Act"]**.

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

2

- Sec. 1. Short title; table of contents.
- Sec. 2. Definitions.

TITLE I—GRID INFRASTRUCTURE AND RESILIENCY

Subtitle A—Grid Infrastructure Resilience and Reliability

- Sec. 1001. Preventing outages and enhancing the resilience of the electric grid.
- Sec. 1002. Hazard mitigation using disaster assistance.
- Sec. 1003. Electric grid reliability and resilience research, development, and demonstration.
- Sec. 1004. Utility demand response.
- Sec. 1005. Siting of interstate electric transmission facilities.
- Sec. 1006. Rulemaking to increase the effectiveness of interregional transmission planning.
- Sec. 1007. Transmission facilitation program.
- Sec. 1008. Deployment of technologies to enhance grid flexibility.
- Sec. 1009. State energy security plans.
- Sec. 1010. State energy program.
- Sec. 1011. Power marketing administration transmission borrowing authority.

Subtitle B—Cybersecurity

- Sec. 1101. Enhancing grid security through public-private partnerships.
- Sec. 1102. Energy Cyber Sense program.
- Sec. 1103. Incentives for advanced cybersecurity technology investment.
- Sec. 1104. Rural and municipal utility advanced cybersecurity grant and technical assistance program.
- Sec. 1105. Enhanced grid security.

Subtitle C—Broadband

- Sec. 1201. Enabling middle mile broadband infrastructure.

TITLE II—SUPPLY CHAINS FOR CLEAN ENERGY TECHNOLOGIES

- Sec. 2001. Earth Mapping Resources Initiative.
- Sec. 2002. National Cooperative Geologic Mapping Program.
- Sec. 2003. National Geological and Geophysical Data Preservation Program.
- Sec. 2004. USGS energy and minerals research facility.
- Sec. 2005. Rare earth elements demonstration facility.
- Sec. 2006. Critical minerals supply chains and reliability.
- Sec. 2007. Battery processing and manufacturing.
- Sec. 2008. Electric drive vehicle battery recycling and second-life applications program.
- Sec. 2009. Advanced energy manufacturing and recycling grant program.

TITLE III—FUELS AND TECHNOLOGY INFRASTRUCTURE INVESTMENTS

Subtitle A—Carbon Capture, Utilization, Storage, and Transportation Infrastructure

- Sec. 3001. Findings.
- Sec. 3002. Carbon utilization program.
- Sec. 3003. Carbon capture technology program.
- Sec. 3004. Carbon dioxide transportation infrastructure finance and innovation.
- Sec. 3005. Carbon storage validation and testing.

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- Sec. 3006. Secure geologic storage permitting.
- Sec. 3007. Geologic carbon sequestration on the outer Continental Shelf.
- Sec. 3008. Carbon removal.

Subtitle B—Hydrogen Research and Development

- Sec. 3101. Findings; purpose.
- Sec. 3102. Definitions.
- Sec. 3103. Clean hydrogen research and development program.
- Sec. 3104. Additional clean hydrogen programs.
- Sec. 3105. Clean hydrogen production qualifications.

Subtitle C—Nuclear Energy Infrastructure

- Sec. 3201. Infrastructure planning for micro nuclear reactors.
- Sec. 3202. Property interests relating to certain projects and protection of information relating to certain agreements.
- Sec. 3203. Civil nuclear credit program.

Subtitle D—Miscellaneous

- Sec. 3301. Solar energy technologies on current and former mine land.
- Sec. 3302. Clean energy demonstration program on current and former mine land.
- Sec. 3303. Study and report on hyperloop technologies.
- Sec. 3304. Hydropower.

TITLE IV—ENABLING ENERGY INFRASTRUCTURE INVESTMENT
AND DATA COLLECTION

Subtitle A—Department of Energy Loan Program

- Sec. 4001. Department of Energy loan programs.

Subtitle B—Energy Information Administration

- Sec. 4101. Definitions.
- Sec. 4102. Data collection in the electricity sector.
- Sec. 4103. Expansion of energy consumption surveys.
- Sec. 4104. Data collection on electric vehicle integration with the electricity grids.
- Sec. 4105. Plan for the forecasting of demand for minerals used in the energy sector.
- Sec. 4106. Expansion of international energy data.
- Sec. 4107. Plan for the National Energy Modeling System.
- Sec. 4108. Report on costs of carbon abatement in the electricity sector.
- Sec. 4109. Harmonization of efforts and data.

Subtitle C—Miscellaneous

- Sec. 4201. Consideration of measures to promote greater electrification of the transportation sector.

TITLE V—ENERGY EFFICIENCY AND BUILDING
INFRASTRUCTURE

Subtitle A—Residential and Commercial Energy Efficiency

- Sec. 5001. Definitions.

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- Sec. 5002. Energy efficiency revolving loan fund capitalization grant program.
Sec. 5003. Energy auditor training grant program.

Subtitle B—Buildings

- Sec. 5101. Cost-effective codes implementation for efficiency and resilience.
Sec. 5102. Building, training, and assessment centers.
Sec. 5103. Career skills training.
Sec. 5104. Commercial building energy consumption information sharing.

Subtitle C—Industrial Energy Efficiency

PART I—INDUSTRY

- Sec. 5201. Future of industry program and industrial research and assessment centers.
Sec. 5202. Sustainable manufacturing initiative.

PART II—SMART MANUFACTURING

- Sec. 5211. Definitions.
Sec. 5212. Leveraging existing agency programs to assist small and medium manufacturers.
Sec. 5213. Leveraging smart manufacturing infrastructure at National Laboratories.
Sec. 5214. State manufacturing leadership.
Sec. 5215. Report.

Subtitle D—Schools and Nonprofits

- Sec. 5301. Grants for energy efficiency improvements and renewable energy improvements at public school facilities.
Sec. 5302. Energy efficiency materials pilot program.

Subtitle E—Miscellaneous

- Sec. 5401. Weatherization assistance program.
Sec. 5402. Energy Efficiency and Conservation Block Grant Program.
Sec. 5403. Survey, analysis, and report on employment and demographics in the energy, energy efficiency, and motor vehicle sectors of the United States.
Sec. 5404. Assisting Federal Facilities with Energy Conservation Technologies grant program.
Sec. 5405. Rebates.
Sec. 5406. Model guidance for combined heat and power systems and waste heat to power systems.

TITLE VI—METHANE REDUCTION INFRASTRUCTURE

- Sec. 6001. Orphaned well site plugging, remediation, and restoration.
Sec. 6002. NEPA review of certain pipeline placement activities.

TITLE VII—ABANDONED MINE LAND RECLAMATION

- Sec. 7001. Abandoned Mine Reclamation Fund direct appropriations.

TITLE VIII—NATURAL RESOURCES-RELATED INFRASTRUCTURE,
WILDFIRE MANAGEMENT, AND ECOSYSTEM RESTORATION

- Sec. 8001. Forest Service Legacy Road and Trail Remediation Program.
 Sec. 8002. Study and report on feasibility of revegetating reclaimed mine sites.
 Sec. 8003. Wildfire risk reduction.
 Sec. 8004. Ecosystem restoration.

TITLE IX—WESTERN WATER INFRASTRUCTURE

- Sec. 9001. Western water infrastructure.

TITLE X—ENERGY ACT OF 2020 FUNDING

- Sec. 10001. Energy storage demonstration projects.
 Sec. 10002. Advanced reactor demonstration program.
 Sec. 10003. Mineral security projects.
 Sec. 10004. Carbon capture demonstration and pilot programs.
 Sec. 10005. Direct air capture technologies prize competitions.
 Sec. 10006. Water power projects.
 Sec. 10007. Renewable energy projects.
 Sec. 10008. Industrial emissions demonstration projects.
 Sec. 10009. Availability of amounts.

TITLE XI—WAGE RATE REQUIREMENTS

- Sec. 11001. Wage rate requirements.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) DEPARTMENT.—The term “Department”
 4 means the Department of Energy.

5 (2) SECRETARY.—The term “Secretary” means
 6 the Secretary of Energy.

7 **TITLE I—GRID INFRASTRUCTURE AND RESILIENCY**

8 **Subtitle A—Grid Infrastructure**

9 **Resilience and Reliability**

10 **SEC. 1001. PREVENTING OUTAGES AND ENHANCING THE** 11 **RESILIENCE OF THE ELECTRIC GRID.**

12 (a) DEFINITIONS.—In this section:

13 (1) CALIFORNIA ELIGIBLE ENTITY.—The term
 14 “California eligible entity” means an entity de-
 15

1 scribed in any of clauses (i) through (vi) of para-
2 graph (2)(A) that is located in the State.

3 (2) ELIGIBLE ENTITY.—

4 (A) IN GENERAL.—Except as provided in
5 subparagraph (B), the term “eligible entity”
6 means—

7 (i) an electric grid operator;

8 (ii) an electricity generator;

9 (iii) a transmission owner or operator;

10 (iv) a distribution provider;

11 (v) a fuel supplier; and

12 (vi) any other relevant entity, as de-
13 termined by the Secretary.

14 (B) EXCLUSIONS.—The term “eligible en-
15 tity” does not include an entity located in the
16 State.

17 (3) EXTREME WEATHER.—

18 (A) IN GENERAL.—The term “extreme
19 weather” means a weather phenomenon that—

20 (i) occurs outside of the historical fre-
21 quency prior to 1990; or

22 (ii) is unexpected, unusual, severe, or
23 unseasonal.

24 (B) INCLUSIONS.—The term “extreme
25 weather” includes—

- 1 (i) a tornado;
- 2 (ii) a thunderstorm;
- 3 (iii) an ice storm;
- 4 (iv) a heat wave;
- 5 (v) flooding;
- 6 (vi) drought;
- 7 (vii) high winds; and
- 8 (viii) mudslides.

9 (4) **NATURAL DISASTER.**—The term “natural
10 disaster” has the meaning given the term in section
11 602(a) of the Robert T. Stafford Disaster Relief and
12 Emergency Assistance Act (42 U.S.C. 5195a(a)).

13 (5) **POWER LINE.**—The term “power line” in-
14 cludes a transmission line or a distribution line, as
15 applicable.

16 (6) **PROGRAM.**—The term “program” means
17 the program established under subsection (b).

18 (7) **RESILIENCE EVENT.**—The term “resilience
19 event” means an event in which, due to extreme
20 weather, a wildfire, or any other natural disaster,
21 operations of the electric grid are disrupted, preven-
22 tively shut off, or cannot operate safely.

23 (8) **STATE.**—The term “State” means the State
24 of California.

1 (b) ESTABLISHMENT OF PROGRAM.—Not later than
2 180 days after the date of enactment of this Act, the Sec-
3 retary shall establish a program under which the Secretary
4 shall make grants to eligible entities and the State in ac-
5 cordance with this section.

6 (c) GRANTS TO ELIGIBLE ENTITIES.—

7 (1) IN GENERAL.—The Secretary may make a
8 grant under the program to an eligible entity to
9 carry out activities that—

10 (A) are supplemental to existing hardening
11 efforts of the eligible entity planned for any
12 given year; and

13 (B)(i) reduce the risk of any power lines
14 owned or operated by the eligible entity causing
15 a wildfire; or

16 (ii) increase the ability of the eligible entity
17 to reduce the likelihood and consequences of re-
18 siliience events.

19 (2) APPLICATION.—

20 (A) IN GENERAL.—An eligible entity desir-
21 ing a grant under the program shall submit to
22 the Secretary an application at such time, in
23 such manner, and containing such information
24 as the Secretary may require.

1 (B) REQUIREMENT.—As a condition of re-
2 ceiving a grant under the program, an eligible
3 entity shall submit to the Secretary, as part of
4 the application of the eligible entity submitted
5 under subparagraph (A), a report detailing
6 past, current, and future efforts by the eligible
7 entity to reduce the likelihood and consequences
8 of resilience events.

9 (3) LIMITATION.—The Secretary may not
10 award a grant to an eligible entity in an amount
11 that is greater than the total amount that the eligi-
12 ble entity has spent in the previous 3 years on ef-
13 forts to reduce the likelihood and consequences of
14 resilience events.

15 (4) PRIORITY.—In making grants to eligible en-
16 tities under the program, the Secretary shall give
17 priority to projects that, in the determination of the
18 Secretary, will generate the greatest community ben-
19 efit in reducing the likelihood and consequences of
20 resilience events.

21 (5) SMALL UTILITIES SET ASIDE.—The Sec-
22 retary shall ensure that not less than 50 percent of
23 the amounts made available to eligible entities under
24 the program are made available to eligible entities

1 that sell not more than 4,000,000 megawatt hours
2 of electricity per year.

3 (d) GRANTS TO THE STATE.—

4 (1) IN GENERAL.—The Secretary, in accord-
5 ance with this subsection, may make grants under
6 the program to the State, which the State may use
7 to award grants to California eligible entities.

8 (2) ANNUAL APPLICATION.—

9 (A) IN GENERAL.—For each fiscal year, to
10 be eligible to receive a grant under this sub-
11 section, the State shall submit to the Secretary
12 an application that includes a plan described in
13 subparagraph (B).

14 (B) PLAN REQUIRED.—A plan prepared by
15 the State for purposes of an application de-
16 scribed in subparagraph (A) shall—

17 (i) describe the criteria and methods
18 that will be used by the State to award
19 grants to California eligible entities;

20 (ii) be adopted after notice and a pub-
21 lic hearing; and

22 (iii) describe the proposed funding
23 distributions and recipients of the grants
24 to be provided by the State.

1 (3) OVERSIGHT.—The Secretary shall ensure
2 that each grant provided to the State under the pro-
3 gram is allocated, pursuant to the applicable State
4 plan, to California eligible entities for projects within
5 the State.

6 (4) PRIORITY.—In making grants to California
7 eligible entities using funds made available to the
8 State under the program, the State shall give pri-
9 ority to projects that, in the determination of the
10 State, will generate the greatest community benefit
11 in reducing the likelihood and consequences of resil-
12 ience events.

13 (5) SMALL UTILITIES SET ASIDE.—The State
14 shall ensure that not less than 10 percent of the
15 amounts made available to California eligible entities
16 from funds made available to the State under the
17 program are made available to California eligible en-
18 tities that sell not more than 4,000,000 megawatt
19 hours of electricity per year.

20 (6) TECHNICAL ASSISTANCE AND ADMINISTRA-
21 TIVE EXPENSES.—Of the amounts made available to
22 the State under the program each fiscal year, the
23 State may use not more than 5 percent for—

24 (A) providing technical assistance under
25 subsection (g)(1)(A); and

1 (B) administrative expenses associated
2 with the program.

3 (7) MATCHING REQUIREMENT.—The State shall
4 be required to match 15 percent of the amount of
5 each grant provided to the State under the program.

6 (e) USE OF GRANTS.—

7 (1) IN GENERAL.—A grant awarded to an eligi-
8 ble entity or a California eligible entity under the
9 program may be used for activities, technologies,
10 equipment, and hardening measures to reduce the
11 likelihood and consequences of resilience events, in-
12 cluding—

13 (A) weatherization technologies and equip-
14 ment;

15 (B) fire-resistant technologies and fire pre-
16 vention systems;

17 (C) monitoring technologies;

18 (D) the undergrounding of electrical equip-
19 ment;

20 (E) utility pole management;

21 (F) the relocation of power lines or the
22 reconductoring of power lines with low-sag, ad-
23 vanced conductors;

24 (G) vegetation and fuel-load management;

1 (H) the use or construction of distributed
2 energy resources for enhancing system adaptive
3 capacity during resilience events, including—

4 (i) microgrids; and

5 (ii) battery-storage subcomponents;

6 (I) adaptive protection technologies;

7 (J) advanced modeling technologies;

8 (K) hardening of power lines, facilities,
9 substations, of other systems; and

10 (L) the replacement of old overhead con-
11 ductors and underground cables.

12 (2) PROHIBITED USES.—

13 (A) IN GENERAL.—A grant awarded to an
14 eligible entity or a California eligible entity
15 under the program may not be used for—

16 (i) construction of a new—

17 (I) electric generating facility; or

18 (II) large-scale battery-storage
19 facility that is not used for enhancing
20 system adaptive capacity during resil-
21 ience events; or

22 (ii) cybersecurity.

23 (B) CERTAIN INVESTMENTS ELIGIBLE FOR
24 RECOVERY.—

1 (i) IN GENERAL.—An eligible entity or
2 California eligible entity may not seek cost
3 recovery for the portion of the cost of any
4 system, technology, or equipment that is
5 funded through a grant awarded under the
6 program.

7 (ii) SAVINGS PROVISION.—Nothing in
8 this subparagraph prohibits an eligible en-
9 tity or California eligible entity from recov-
10 ering through traditional or incentive-based
11 ratemaking any portion of an investment
12 in a system, technology, or equipment that
13 is not funded by a grant awarded under
14 the program.

15 (f) DISTRIBUTION OF FUNDING.—Of the amounts
16 made available to carry out the program for a fiscal year,
17 the Secretary shall ensure that—

18 (1) not less than 80 percent is used to award
19 grants to eligible entities under subsection (c); and

20 (2) not more than 20 percent is used to make
21 grants to the State under subsection (d).

22 (g) TECHNICAL AND OTHER ASSISTANCE.—

23 (1) IN GENERAL.—The Secretary and the State
24 may—

1 (A) provide technical assistance and facili-
2 tate the distribution and sharing of information
3 to reduce the likelihood and consequences of re-
4 siliience events; and

5 (B) promulgate consumer-facing informa-
6 tion and resources to inform the public of best
7 practices and resources relating to reducing the
8 likelihood and consequences of resilience events.

9 (2) USE OF FUNDS BY THE SECRETARY.—Of
10 the amounts made available to the Secretary to
11 carry out the program each fiscal year, the Secretary
12 may use not more than 5 percent for—

13 (A) providing technical assistance under
14 paragraph (1)(A); and

15 (B) administrative expenses associated
16 with the program.

17 (h) MATCHING REQUIREMENT.—

18 (1) IN GENERAL.—Except as provided in para-
19 graph (2), an eligible entity or California eligible en-
20 tity that receives a grant under this section shall be
21 required to match 100 percent of the amount of the
22 grant.

23 (2) EXCEPTION FOR SMALL UTILITIES.—With
24 respect to an eligible entity or California eligible en-
25 tity that sells not more than 4,000,000 megawatt

1 hours of electricity per year, the eligible entity or
2 California eligible entity shall be required to match
3 1 G7 T2L K3 of the amount of the grant.

4 (i) BIENNIAL REPORT TO CONGRESS.—

5 (1) IN GENERAL.—Not later than 2 years after
6 the date of enactment of this Act, and every 2 years
7 thereafter through 2026, the Secretary shall submit
8 to the Committee on Energy and Natural Resources
9 of the Senate and the Committee on Energy and
10 Commerce of the House of Representatives a report
11 describing the program.

12 (2) REQUIREMENTS.—The report under para-
13 graph (1) shall include information and data on—

14 (A) the costs of the projects for which
15 grants are awarded to eligible entities and Cali-
16 fornia eligible entities;

17 (B) the types of activities, technologies,
18 equipment, and hardening measures funded by
19 those grants; and

20 (C) the extent to which the ability of the
21 power grid to withstand resilience events has in-
22 creased.

23 (j) APPROPRIATIONS.—In addition to amounts other-
24 wise made available, there is appropriated to the Secretary
25 to carry out the program, out of any amounts in the

1 Treasury not otherwise appropriated, \$1,000,000,000 for
2 each of fiscal years 2022 through 2026.

3 **SEC. 1002. HAZARD MITIGATION USING DISASTER ASSIST-**
4 **ANCE.**

5 Section 404(f)(12) of the Robert T. Stafford Disaster
6 Relief and Emergency Assistance Act (42 U.S.C.
7 5170c(f)(12)) is amended—

8 (1) by inserting “and wildfire” after “wind-
9 storm”;

10 (2) by striking “including replacing” and in-
11 serting the following: “including—

12 “(A) replacing”;

13 (3) in subparagraph (A) (as so designated)—

14 (A) by inserting “, wildfire,” after “ex-
15 treme wind”; and

16 (B) by adding “and” after the semicolon
17 at the end; and

18 (4) by adding at the end the following:

19 “(B) the installation of fire-resistant wires
20 and infrastructure and the undergrounding of
21 wires;”.

22 **SEC. 1003. ELECTRIC GRID RELIABILITY AND RESILIENCE**
23 **RESEARCH, DEVELOPMENT, AND DEM-**
24 **ONSTRATION.**

25 (a) DEFINITIONS.—In this section:

1 (1) FEDERAL FINANCIAL ASSISTANCE.—The
2 term “Federal financial assistance” has the meaning
3 given the term in section 200.1 of title 2, Code of
4 Federal Regulations.

5 (2) INDIAN TRIBE.—The term “Indian Tribe”
6 has the meaning given the term in section 4 of the
7 Indian Self-Determination and Education Assistance
8 Act (25 U.S.C. 5304).

9 (b) ENERGY INFRASTRUCTURE FEDERAL FINANCIAL
10 ASSISTANCE PROGRAM.—

11 (1) DEFINITIONS.—In this subsection:

12 (A) ELIGIBLE ENTITY.—The term “eligible
13 entity” means each of—

14 (i) a State;

15 (ii) a combination of 2 or more
16 States;

17 (iii) an Indian Tribe;

18 (iv) a unit of local government; and

19 (v) a public utility commission.

20 (B) PROGRAM.—The term “program”
21 means the competitive Federal financial assist-
22 ance program established under paragraph (2).

23 (2) ESTABLISHMENT.—Not later than 90 days
24 after the date of enactment of this Act, the Sec-
25 retary shall establish a program, to be known as the

1 “Program Upgrading Our Electric Grid and Ensuring
2 Reliability and Resiliency”, to provide, on a com-
3 petitive basis, Federal financial assistance to eligible
4 entities to carry out the purposes described in para-
5 graph (3).

6 (3) PURPOSES.—The purposes of the program
7 are—

8 (A) to demonstrate innovative approaches
9 to transmission, storage, and distribution infra-
10 structure to harden and enhance resilience and
11 reliability; and

12 (B) to demonstrate new approaches to en-
13 hance regional grid resilience, implemented
14 through States by public and publicly regulated
15 entities on a cost-shared basis.

16 (4) APPLICATIONS.—To be eligible to receive
17 Federal financial assistance under the program, an
18 eligible entity shall submit to the Secretary an appli-
19 cation at such time, in such manner, and containing
20 such information as the Secretary may require, in-
21 cluding a description of—

22 (A) how the Federal financial assistance
23 would be used;

24 (B) the expected beneficiaries, and

1 (C) in the case of a proposal from an eligi-
2 ble entity described in paragraph (1)(A)(ii),
3 how the proposal would improve regional energy
4 infrastructure.

5 (5) SELECTION.—The Secretary shall select eli-
6 gible entities to receive Federal financial assistance
7 under the program on a competitive basis.

8 (6) COST SHARE.—Section 988 of the Energy
9 Policy Act of 2005 (42 U.S.C. 16352) shall apply to
10 Federal financial assistance provided under the pro-
11 gram.

12 (7) APPROPRIATIONS.—In addition to amounts
13 otherwise made available, there is appropriated to
14 the Secretary to carry out this subsection, out of any
15 amounts in the Treasury not otherwise appropriated,
16 \$1,000,000,000 for each of fiscal years 2022
17 through 2026.

18 (c) ENERGY IMPROVEMENT IN RURAL OR REMOTE
19 AREAS.—

20 (1) DEFINITION OF RURAL OR REMOTE
21 AREA.—In this subsection, the term “rural or re-
22 mote area” means a city, town, or unincorporated
23 area that has a population of not more than 10,000
24 inhabitants.

1 (2) REQUIRED ACTIVITIES.—The Secretary
2 shall carry out activities to improve in rural or re-
3 mote areas of the United States—

4 (A) the resilience, safety, reliability, and
5 availability of energy; and

6 (B) environmental protection from adverse
7 impacts of energy generation.

8 (3) RESEARCH AND INFORMATION SHARING.—
9 The Secretary, the Secretary of the Interior, the
10 Commandant of the Coast Guard, and the Secretary
11 of State shall seek to enter into a partnership with
12 the member states of the Arctic Council—

13 (A) to conduct research and share informa-
14 tion on—

15 (i) the effects of oil spills; and

16 (ii) the effectiveness of measures to
17 reduce the risk of oil spills; and

18 (B) to develop an international guideline
19 for oil spill preparedness and response in the
20 Arctic.

21 (4) FEDERAL FINANCIAL ASSISTANCE.—The
22 Secretary, in consultation with the Secretary of Inte-
23 rior, may provide Federal financial assistance to
24 rural or remote areas for the purpose of—

1 (A) overall cost-effectiveness of energy gen-
2 eration, transmission, or distribution systems;

3 (B) siting or upgrading transmission and
4 distribution lines;

5 (C) reducing greenhouse gas emissions;

6 (D) providing or modernizing electric gen-
7 eration facilities; and

8 (E) increasing energy efficiency.

9 (5) APPROPRIATIONS.—In addition to amounts
10 otherwise made available, there is appropriated to
11 the Secretary to carry out this subsection, out of any
12 amounts in the Treasury not otherwise appropriated,
13 \$200,000,000 for each of fiscal years 2022 through
14 2026.

15 (d) ENERGY INFRASTRUCTURE RESILIENCE FRAME-
16 WORK.—

17 (1) IN GENERAL.—The Secretary, in collabora-
18 tion with the Secretary of Homeland Security, the
19 Federal Energy Regulatory Commission, the North
20 American Electric Reliability Corporation, and inter-
21 ested energy infrastructure stakeholders, shall de-
22 velop common analytical frameworks, tools, metrics,
23 and data to assess the resilience, reliability, safety,
24 and security of energy infrastructure in the United
25 States, including by developing and storing an inven-

1 tory of easily transported high-voltage recovery
2 transformers and other required equipment.

3 (2) ASSESSMENT AND REPORT.—

4 (A) ASSESSMENT.—The Secretary shall
5 carry out an assessment of—

6 (i) with respect to the inventory of
7 high-voltage recovery transformers, new
8 transformers, and other equipment pro-
9 posed to be developed and stored under
10 paragraph (1)—

11 (I) the policies, technical speci-
12 fications, and logistical and program
13 structures necessary to mitigate the
14 risks associated with the loss of high-
15 voltage recovery transformers;

16 (II) the technical specifications
17 for high-voltage recovery trans-
18 formers;

19 (III) where inventory of high-
20 voltage recovery transformers should
21 be stored;

22 (IV) the quantity of high-voltage
23 recovery transformers necessary for
24 the inventory;

1 (V) how the stored inventory of
2 high-voltage recovery transformers
3 would be secured and maintained;

4 (VI) how the high-voltage recov-
5 ery transformers may be transported;

6 (VII) opportunities for developing
7 new flexible advanced transformer de-
8 signs; and

9 (VIII) whether new Federal regu-
10 lations or cost-sharing requirements
11 are necessary to carry out the storage
12 of high-voltage recovery transformers;
13 and

14 (ii) any efforts carried out by industry
15 as of the date of the assessment—

16 (I) to share transformers and
17 equipment;

18 (II) to develop plans for next
19 generation transformers; and

20 (III) to plan for surge and long-
21 term manufacturing of, and long-term
22 standardization of, transformer de-
23 signs.

24 (B) REPORT.—Not later than 180 days
25 after the date of enactment of this Act, the Sec-

1 retary shall submit to Congress a report de-
2 scribing the results of the assessment carried
3 out under subparagraph (A).

4 **SEC. 1004. UTILITY DEMAND RESPONSE.**

5 (a) CONSIDERATION OF DEMAND-RESPONSE STAND-
6 ARD.—

7 (1) IN GENERAL.—Section 111(d) of the Public
8 Utility Regulatory Policies Act of 1978 (16 U.S.C.
9 2621(d)) is amended by adding at the end the fol-
10 lowing:

11 “(20) DEMAND-RESPONSE PRACTICES.—

12 “(A) IN GENERAL.—Each electric utility
13 shall promote the use of demand-response prac-
14 tices by commercial, residential, and industrial
15 consumers to reduce electricity consumption
16 during periods of unusually high demand.

17 “(B) RATE RECOVERY.—

18 “(i) IN GENERAL.—Each State regu-
19 latory authority shall consider establishing
20 rate mechanisms allowing an electric utility
21 with respect to which the State regulatory
22 authority has ratemaking authority to
23 timely recover the costs of promoting de-
24 mand-response practices in accordance
25 with subparagraph (A).

1 “(ii) NONREGULATED ELECTRIC UTIL-
2 ITIES.—A nonregulated electric utility may
3 establish rate mechanisms for the timely
4 recovery of the costs of promoting demand-
5 response practices in accordance with sub-
6 paragraph (A).”.

7 (2) COMPLIANCE.—

8 (A) TIME LIMITATIONS.—Section 112(b)
9 of the Public Utility Regulatory Policies Act of
10 1978 (16 U.S.C. 2622(b)) is amended by add-
11 ing at the end the following:

12 “(7)(A) Not later than 1 year after the date of
13 enactment of this paragraph, each State regulatory
14 authority (with respect to each electric utility for
15 which the State has ratemaking authority) and each
16 nonregulated electric utility shall commence consid-
17 eration under section 111, or set a hearing date for
18 consideration, with respect to the standard estab-
19 lished by paragraph (20) of section 111(d).

20 “(B) Not later than 2 years after the date of
21 enactment of this paragraph, each State regulatory
22 authority (with respect to each electric utility for
23 which the State has ratemaking authority), and each
24 nonregulated electric utility shall complete the con-
25 sideration and make the determination under section

1 111 with respect to the standard established by
2 paragraph (20) of section 111(d).”.

3 (B) FAILURE TO COMPLY.—

4 (i) IN GENERAL.—Section 112(c) of
5 the Public Utility Regulatory Policies Act
6 of 1978 (16 U.S.C. 2622(c)) is amended—

7 (I) by striking “such paragraph
8 (14)” and all that follows through
9 “paragraphs (16)” and inserting
10 “such paragraph (14). In the case of
11 the standard established by paragraph
12 (15) of section 111(d), the reference
13 contained in this subsection to the
14 date of enactment of this Act shall be
15 deemed to be a reference to the date
16 of enactment of that paragraph (15).
17 In the case of the standards estab-
18 lished by paragraphs (16)”; and

19 (II) by adding at the end the fol-
20 lowing: “In the case of the standard
21 established by paragraph (20) of sec-
22 tion 111(d), the reference contained in
23 this subsection to the date of enact-
24 ment of this Act shall be deemed to be

1 a reference to the date of enactment
2 of that paragraph (20).”.

3 (ii) TECHNICAL CORRECTION.—Para-
4 graph (2) of section 1254(b) of the Energy
5 Policy Act of 2005 (Public Law 109–58;
6 119 Stat. 971) is repealed and the amend-
7 ment made by that paragraph (as in effect
8 on the day before the date of enactment of
9 this Act) is void, and section 112(d) of the
10 Public Utility Regulatory Policies Act of
11 1978 (16 U.S.C. 2622(d)) shall be in ef-
12 fect as if that amendment had not been en-
13 acted.

14 (C) PRIOR STATE ACTIONS.—

15 (i) IN GENERAL.—Section 112 of the
16 Public Utility Regulatory Policies Act of
17 1978 (16 U.S.C. 2622) is amended by add-
18 ing at the end the following:

19 “(g) PRIOR STATE ACTIONS.—Subsections (b) and
20 (c) shall not apply to the standard established by para-
21 graph (20) of section 111(d) in the case of any electric
22 utility in a State if, before the date of enactment of this
23 subsection—

24 “(1) the State has implemented for the electric
25 utility the standard (or a comparable standard);

1 “(2) the State regulatory authority for the
2 State or the relevant nonregulated electric utility has
3 conducted a proceeding to consider implementation
4 of the standard (or a comparable standard) for the
5 electric utility; or

6 “(3) the State legislature has voted on the im-
7 plementation of the standard (or a comparable
8 standard) for the electric utility.”.

9 (ii) CROSS-REFERENCE.—Section 124
10 of the Public Utility Regulatory Policies
11 Act of 1978 (16 U.S.C. 2634) is amend-
12 ed—

13 (I) by striking “this subsection”
14 each place it appears and inserting
15 “this section”; and

16 (II) by adding at the end the fol-
17 lowing: “In the case of the standard
18 established by paragraph (20) of sec-
19 tion 111(d), the reference contained in
20 this section to the date of enactment
21 of this Act shall be deemed to be a
22 reference to the date of enactment of
23 that paragraph (20).”.

1 (b) OPTIONAL FEATURES OF STATE ENERGY CON-
2 SERVATION PLANS.—Section 362(d) of the Energy Policy
3 and Conservation Act (42 U.S.C. 6322(d)) is amended—

4 (1) in paragraph (16), by striking “and” at the
5 end;

6 (2) by redesignating paragraph (17) as para-
7 graph (18); and

8 (3) by inserting after paragraph (16) the fol-
9 lowing:

10 “(17) programs that promote the installation
11 and use of demand-response technology and de-
12 mand-response practices; and”.

13 (c) FEDERAL ENERGY MANAGEMENT PROGRAM.—
14 Section 543(i) of the National Energy Conservation Policy
15 Act (42 U.S.C. 8253(i)) is amended—

16 (1) in paragraph (1)—

17 (A) in subparagraph (A), by striking
18 “and” at the end;

19 (B) in subparagraph (B), by striking the
20 period at the end and inserting “; and”; and

21 (C) by adding at the end the following:

22 “(C) to reduce energy consumption during
23 periods of unusually high electricity or natural
24 gas demand.”; and

25 (2) in paragraph (3)(A)—

1 (A) in clause (v), by striking “and” at the
2 end;

3 (B) in clause (vi), by striking the period at
4 the end and inserting “; and”; and

5 (C) by adding at the end the following:

6 “(vii) promote the installation of de-
7 mand-response technology and the use of
8 demand-response practices in Federal
9 buildings.”.

10 (d) COMPONENTS OF ZERO-NET-ENERGY COMMER-
11 CIAL BUILDINGS INITIATIVE.—Section 422(d)(3) of the
12 Energy Independence and Security Act of 2007 (42
13 U.S.C. 17082(d)) is amended by inserting “(including de-
14 mand-response technologies, practices, and policies)” after
15 “policies”.

16 **SEC. 1005. SITING OF INTERSTATE ELECTRIC TRANS-**
17 **MISSION FACILITIES.**

18 (a) DESIGNATION OF NATIONAL INTEREST ELEC-
19 TRIC TRANSMISSION CORRIDORS.—Section 216(a) of the
20 Federal Power Act (16 U.S.C. 824p(a)) is amended—

21 (1) in paragraph (1)—

22 (A) by inserting “and Indian Tribes” after
23 “affected States”; and

24 (B) by inserting “capacity constraints
25 and” before “congestion”;

1 (2) in paragraph (2)—

2 (A) by striking “After” and inserting “Not
3 less frequently than once every 3 years, the Sec-
4 retary, after”; and

5 (B) by striking “affected States” and all
6 that follows through the period at the end and
7 inserting the following: “affected States and In-
8 dian Tribes), shall issue a report, based on the
9 study under paragraph (1) or other information
10 relating to electric transmission capacity con-
11 straints and congestion, which may designate as
12 a national interest electric transmission corridor
13 any geographic area that—

14 “(i) is experiencing electric energy
15 transmission capacity constraints or con-
16 gestion that adversely affects consumers;
17 or

18 “(ii) is expected to experience such
19 energy transmission capacity constraints or
20 congestion.”;

21 (3) in paragraph (3)—

22 (A) by striking “The Secretary shall con-
23 duct the study and issue the report in consulta-
24 tion” and inserting “Not less frequently than
25 once every 3 years, the Secretary, in conducting

1 the study under paragraph (1) and issuing the
2 report under paragraph (2), shall consult”; and
3 (4) in paragraph (4)—

4 (A) in subparagraph (C), by inserting “or
5 energy security” after “independence”;

6 (B) in subparagraph (D), by striking
7 “and” at the end;

8 (C) in subparagraph (E), by striking the
9 period at the end and inserting a semicolon;
10 and

11 (D) by adding at the end the following:

12 “(F) the designation would—

13 “(i) enhance the ability of facilities that
14 generate or transmit renewable energy, low-
15 emission energy, or emission-free energy to con-
16 nect to the electric grid;

17 “(ii) promote electrification of other sec-
18 tors, including the transportation sector; or

19 “(iii) facilitate other public policies to
20 decarbonize the grid;

21 “(G) the designation—

22 “(i) maximizes existing rights-of-way, in-
23 cluding along highways, brownfields, and rail-
24 ways; and

1 “(ii) avoids, to the maximum extent prac-
2 ticable, sensitive environmental areas and cul-
3 tural heritage sites; and

4 “(H) the designation would result in a reduc-
5 tion in the cost to purchase electric energy for con-
6 sumers.”.

7 (b) CONSTRUCTION PERMIT.—Section 216(b) of the
8 Federal Power Act (16 U.S.C. 824p(b)) is amended—

9 (1) in paragraph (1)—

10 (A) in subparagraph (A)(ii), by inserting
11 “or interregional benefits” after “interstate
12 benefits”; and

13 (B) by striking subparagraph (C) and in-
14 serting the following:

15 “(C) a State commission or other entity that
16 has authority to approve the siting of the facilities—

17 “(i) has not approved or denied an applica-
18 tion seeking approval pursuant to applicable
19 law by the date that is 1 year after the later
20 of—

21 “(I) the date on which the application
22 was filed; and

23 “(II) the date on which the relevant
24 national interest electric transmission cor-

1 ridor was designated by the Secretary
2 under subsection (a);

3 “(ii) has conditioned its approval in such a
4 manner that the proposed construction or modi-
5 fication will not significantly reduce trans-
6 mission congestion in interstate commerce or is
7 not economically feasible; or

8 “(iii) has denied an application seeking ap-
9 proval pursuant to applicable law;”.

10 (c) RIGHTS-OF-WAY.—Section 216(e)(1) of the Fed-
11 eral Power Act (16 U.S.C. 824p(e)(1)) is amended by
12 striking “facilities, the” and inserting “facilities and, in
13 the determination of the Commission, the permit holder
14 has made good faith efforts to engage with landowners
15 and other stakeholders early in the applicable permitting
16 process, the”.

17 (d) INTERSTATE COMPACTS.—Section 216(i) of the
18 Federal Power Act (16 U.S.C. 824p(i)) is amended—

19 (1) in paragraph (2), by striking “may” and in-
20 serting “shall”; and

21 (2) in paragraph (4), by striking “the mem-
22 bers” and all that follows through the period at the
23 end and inserting the following: “the Secretary de-
24 termines that the members of the compact are in
25 disagreement after the later of—

1 “(A) the date that is 1 year after the date
2 on which the relevant application for the facility
3 was filed; and

4 “(B) the date that is 1 year after the date
5 on which the relevant national interest electric
6 transmission corridor was designated by the
7 Secretary under subsection (a).”.

8 **SEC. 1006. RULEMAKING TO INCREASE THE EFFECTIVE-**
9 **NESS OF INTERREGIONAL TRANSMISSION**
10 **PLANNING.**

11 (a) IN GENERAL.—Not later than 180 days after the
12 date of enactment of this Act, the Federal Energy Regu-
13 latory Commission shall initiate a rulemaking address-
14 ing—

15 (1) the effectiveness of existing planning proc-
16 esses for identifying interregional transmission
17 projects that provide economic, reliability, oper-
18 ational, public policy, and environmental benefits
19 (including reductions in carbon emissions), taking
20 into consideration the public interest, the integrity of
21 markets, and the protection of consumers;

22 (2) changes to the processes described in para-
23 graph (1) to ensure that efficient, cost-effective, and
24 broadly beneficial interregional transmission solu-

1 tions are selected for cost allocation, taking into con-
2 sideration—

3 (A) the public interest;

4 (B) the integrity of markets;

5 (C) the protection of consumers;

6 (D) the broad range of economic, reli-
7 ability, operational, public policy, and environ-
8 mental benefits that interregional transmission
9 provides, including reductions in carbon emis-
10 sions;

11 (E) the need for single projects to secure
12 approvals based on a comprehensive assessment
13 of the multiple benefits provided;

14 (F) that projects that meet interregional
15 benefit criteria should not be subject to subse-
16 quent reassessment by transmission planning
17 authorities;

18 (G) the importance of synchronization of
19 planning processes in neighboring regions, such
20 as using a joint model on a consistent timeline
21 with a single set of needs, input assumptions,
22 and benefit metrics;

23 (H) that evaluation of long-term scenarios
24 should align with the expected life of a trans-
25 mission asset;

1 (I) that transmission planning authorities
2 should allow for the identification and joint
3 evaluation of alternatives proposed by stake-
4 holders;

5 (J) that interregional planning should be
6 done regularly and not less frequently than
7 once every 3 years; and

8 (K) the elimination of arbitrary project
9 voltage, size, or cost requirements for inter-
10 regional solutions; and

11 (3) cost allocation methodologies that reflect
12 the multiple benefits provided by interregional trans-
13 mission solutions, including economic, reliability,
14 operational, public policy, and environmental bene-
15 fits (including reductions in carbon emissions).

16 (b) TIMING.—Not later than 18 months after the
17 date of enactment of this Act, the Federal Energy Regu-
18 latory Commission shall promulgate a final rule to com-
19 plete the rulemaking initiated under subsection (a).

20 **SEC. 1007. TRANSMISSION FACILITATION PROGRAM.**

21 (a) DEFINITIONS.—In this section:

22 (1) CAPACITY CONTRACT.—The term “capacity
23 contract” means a contract entered into by the Sec-
24 retary and an eligible entity under subsection

1 (f)(1)(A) for the right to the use of the transmission
2 capacity of an eligible project.

3 (2) DEPARTMENT.—The term “Department”
4 means the Department of Energy.

5 (3) ELIGIBLE ENTITY.—The term “eligible enti-
6 ty” means a non-Federal entity seeking to carry out
7 an eligible project.

8 (4) ELIGIBLE PROJECT.—

9 (A) IN GENERAL.—The term “eligible
10 project” means a project for the construction or
11 upgrading of 1 or more electric power trans-
12 mission lines that—

13 (i) are not owned by the Federal Gov-
14 ernment;

15 (ii) are capable of transmitting elec-
16 tric energy of not less than—

17 (I) 1,000 megawatts; or

18 (II) 500 megawatts, if the
19 project consists of upgrading an exist-
20 ing transmission line or constructing a
21 new transmission line in an existing
22 transmission, transportation, or tele-
23 communications infrastructure cor-
24 ridor;

1 (iii) are not subject to all costs to con-
2 struct the project being recovered through
3 a Transmission Organization (as defined in
4 section 3 of the Federal Power Act (16
5 U.S.C. 796)); and

6 (iv)(I) are new electric power trans-
7 mission lines, including replacements of ex-
8 isting electric power transmission lines; or

9 (II) are significant upgrades that in-
10 crease the transmission capacity of an ex-
11 isting electric power transmission line.

12 (B) INCLUSION.—The term “eligible
13 project” includes the construction or upgrading
14 of related facilities.

15 (5) ENVIRONMENTAL REVIEW PROCESS.—The
16 term “environmental review process” means—

17 (A) the process of preparing an environ-
18 mental impact statement, an environmental as-
19 sessment, a categorical exclusion, or any other
20 document prepared under the National Envi-
21 ronmental Policy Act of 1969 (42 U.S.C. 4321
22 et seq.) for an eligible project; and

23 (B) any other process relating to the prep-
24 aration or completion of an environmental per-

1 mit, approval, review, or study required for an
2 eligible project under any other Federal law.

3 (6) FEDERAL LAND.—The term “Federal land”
4 means—

5 (A) public lands (as defined in section 103
6 of the Federal Land Policy and Management
7 Act of 1976 (43 U.S.C. 1702)); and

8 (B) National Forest System land.

9 (7) FUND.—The term “Fund” means the
10 Transmission Facilitation Fund established by sub-
11 section (e)(1).

12 (8) PROGRAM.—The term “program” means
13 the Transmission Facilitation Program established
14 by subsection (b).

15 (9) RELATED FACILITY.—

16 (A) IN GENERAL.—The term “related fa-
17 cility” means a facility related to an electric
18 power transmission line described in paragraph
19 (5)(A).

20 (B) EXCLUSIONS.—The term “related fa-
21 cility” does not include—

22 (i) facilities used primarily to generate
23 electric energy; or

24 (ii) facilities used in the local distribu-
25 tion of electric energy.

1 (10) SECRETARY.—The term “Secretary”
2 means the Secretary of Energy, acting through the
3 Assistant Secretary for the Office of Electricity.

4 (b) ESTABLISHMENT.—There is established a pro-
5 gram, to be known as the “Transmission Facilitation Pro-
6 gram”, under which the Secretary shall facilitate the con-
7 struction of non-Federal electric power transmission lines
8 and related facilities in accordance with subsection (f).

9 (c) ADMINISTRATION.—The Secretary shall admin-
10 ister the program.

11 (d) APPLICATIONS.—

12 (1) IN GENERAL.—To be eligible for assistance
13 under this section, an eligible entity shall submit to
14 the Secretary an application at such time, in such
15 manner, and containing such information as the Sec-
16 retary may require.

17 (2) PROCEDURES.—The Secretary shall estab-
18 lish procedures for the solicitation and review of ap-
19 plications from eligible entities.

20 (e) FUNDING.—

21 (1) TRANSMISSION FACILITATION FUND.—
22 There is established in the Treasury a fund, to be
23 known as the “Transmission Facilitation Fund”,
24 consisting of—

1 (A) any amounts appropriated to the
2 Fund; and

3 (B) any amounts deposited in the Fund
4 under paragraph (2).

5 (2) DEPOSITS.—The Secretary shall deposit in
6 the Fund—

7 (A) all amounts received by the Secretary,
8 including receipts, collections, and recoveries,
9 from any source relating to expenses incurred
10 by the Secretary in carrying out the program,
11 including—

12 (i) costs recovered for a capacity con-
13 tract; and

14 (ii) amounts received as repayment of
15 a loan issued to an eligible entity under
16 subsection (f)(1)(B);

17 (B) all amounts borrowed from the Treas-
18 ury by the Secretary for the program under
19 paragraph (3); and

20 (C) any amounts appropriated to the Sec-
21 retary for the program.

22 (3) BORROWING AUTHORITY.—The Secretary
23 may borrow from the Treasury \$2,500,000,000 to
24 carry out the program.

1 (4) EXPENDITURES.—The amounts in the
2 Fund shall be available to the Secretary, without
3 further appropriation or fiscal year limitation, to
4 carry out the program.

5 (5) COST RECOVERY.—

6 (A) IN GENERAL.—Except as provided in
7 subparagraph (B), the cost of any facilitation
8 activities carried out by the Secretary under
9 subsection (f)(1) shall be collected, on a sched-
10 ule to be determined by the Secretary—

11 (i) from eligible entities receiving the
12 benefit of the applicable facilitation activ-
13 ity; or

14 (ii) with respect to a contracted trans-
15 mission capacity under subsection
16 (f)(1)(A)—

17 (I) through rates charged to
18 third parties for the use of the con-
19 tracted transmission capacity; and

20 (II) on termination of the appli-
21 cable capacity contract under sub-
22 section (g)(6), from the applicable
23 third party or eligible entity, in ac-
24 cordance with that subsection.

25 (B) EXCEPTION.—

1 (i) IN GENERAL.—The Secretary may
2 terminate a capacity contract under sub-
3 section (g)(6) without recovering the out-
4 standing costs of facilitating the applicable
5 eligible project if the Secretary determines
6 that it is not feasible to recover those costs
7 prior to terminating the capacity contract,
8 as determined by the Secretary.

9 (ii) FORGIVENESS OF CERTAIN
10 AMOUNTS.—If the Secretary terminates a
11 capacity contract under clause (i), any
12 amounts borrowed by the Secretary from
13 the Treasury for the purpose of facilitating
14 the applicable eligible project—

15 (I) shall be forgiven; and

16 (II) shall not count toward the
17 limitation described in paragraph
18 (3)(B).

19 (6) REFINANCING.—The Secretary may refi-
20 nance loans made to the Secretary under subsection
21 (e)(3)(A) within the Treasury.

22 (7) AUTHORIZATION OF APPROPRIATIONS.—
23 There is authorized to be appropriated to the Sec-
24 retary to carry out the program, for any administra-
25 tive expenses of carrying out the program that are

1 not recovered under paragraph (5), \$10,000,000 for
2 each of fiscal years 2022 through 2026.

3 (f) FACILITATION OF ELIGIBLE PROJECTS.—

4 (1) IN GENERAL.—To facilitate eligible
5 projects, the Secretary may—

6 (A) subject to subsections (g) and (j),
7 enter into a capacity contract with respect to an
8 eligible project prior to the date on which the
9 eligible project is completed;

10 (B) subject to subsections (h) and (j),
11 issue a loan to an eligible entity for the costs
12 of carrying out an eligible project;

13 (C) provide technical assistance to an eligi-
14 ble entity with respect to an eligible project;
15 and

16 (D) notwithstanding any other provision of
17 law and subject to subsection (i), to the extent
18 that an eligible project is required to undergo
19 an environmental review process, including with
20 respect to any rights-of-way across Federal
21 land, establish the Department as the Federal
22 lead agency for that environmental review proc-
23 ess.

24 (2) REQUIREMENT.—The provision and receipt
25 of assistance for an eligible project under paragraph

1 (1) shall be subject to such terms and conditions as
2 the Secretary determines to be appropriate to ensure
3 the success of the program.

4 (g) CAPACITY CONTRACTS.—

5 (1) PURPOSE.—In entering into capacity con-
6 tracts under subsection (f)(1)(A), the Secretary shall
7 seek to enter into capacity contracts that will en-
8 courage other entities to enter into contracts for the
9 transmission capacity of the eligible projects.

10 (2) PAYMENT.—The amount paid by the Sec-
11 retary to an eligible entity under a capacity contract
12 for the right to the use of the transmission capacity
13 of an eligible project shall be—

14 (A) the fair market value for the use of the
15 transmission capacity, as determined by the
16 Secretary, taking into account, as the Secretary
17 determines to be necessary, the comparable
18 value for the use of the transmission capacity of
19 other electric power transmission lines; and

20 (B) on a schedule and in such divided
21 amounts, including in a single amount, that the
22 Secretary determines are likely to facilitate con-
23 struction of the eligible project, taking into ac-
24 count standard industry practice and factors

1 specific to each applicant, including, as applica-
2 ble—

3 (i) potential review by a State regu-
4 latory entity of the revenue requirement of
5 an electric utility; and

6 (ii) the financial model of an inde-
7 pendent transmission developer.

8 (3) LIMITATIONS.—A capacity contract shall—

9 (A) be for a term of not more than 40
10 years; and

11 (B) be for not more than 50 percent of the
12 total proposed transmission capacity of the ap-
13 plicable eligible project.

14 (4) TERMS AND CONDITIONS.—A capacity con-
15 tract shall include such detailed terms and condi-
16 tions as the Secretary determines to be appropriate
17 to protect the interests of the United States.

18 (5) TRANSMISSION MARKETING.—

19 (A) IN GENERAL.—If the Secretary has
20 not terminated a capacity contract under para-
21 graph (6) before the applicable eligible project
22 enters into service, the Secretary may enter into
23 1 or more contracts with a third party to mar-
24 ket the transmission capacity of the eligible

1 project to which the Secretary holds rights
2 under the capacity contract.

3 (B) RETURN.—The Secretary shall seek to
4 ensure that any contract entered into under
5 subparagraph (A) maximizes the financial re-
6 turn to the Federal Government.

7 (C) COMPETITIVE SOLICITATION.—The
8 Secretary shall only select third parties for con-
9 tracts under this paragraph through a competi-
10 tive solicitation.

11 (6) TERMINATION.—

12 (A) IN GENERAL.—The Secretary shall
13 seek to terminate a capacity contract as soon as
14 practicable after determining that sufficient
15 transmission capacity of the eligible project has
16 been secured by other entities to ensure the
17 long-term financial viability of the eligible
18 project, including through 1 or more transfers
19 under subparagraph (B).

20 (B) TRANSFER.—On payment to the Sec-
21 retary by a third party for transmission capac-
22 ity to which the Secretary has rights under a
23 capacity contract, the Secretary may transfer
24 the rights to that transmission capacity to that
25 third party.

1 (C) RELINQUISHMENT.—On payment to
2 the Secretary by the applicable eligible entity
3 for transmission capacity to which the Sec-
4 retary has rights under a capacity contract, the
5 Secretary may relinquish the rights to that
6 transmission capacity to the eligible entity.

7 (D) REQUIREMENT.—A payment under
8 subparagraph (B) or (C) shall be in an amount
9 sufficient for the Secretary to recover any re-
10 maining costs incurred by the Secretary with
11 respect to the quantity of transmission capacity
12 affected by the transfer under subparagraph
13 (B) or the relinquishment under subparagraph
14 (C), as applicable.

15 (7) OTHER FEDERAL CAPACITY POSITIONS.—
16 The existence of a capacity contract does not pre-
17 clude a Federal entity, including a Federal power
18 marketing administration, from otherwise securing
19 transmission capacity at any time from an eligible
20 project, to the extent that the Federal entity is au-
21 thorized to secure that transmission capacity.

22 (8) FORM OF FINANCIAL ASSISTANCE.—Enter-
23 ing into a capacity contract under subsection
24 (f)(1)(A) shall be considered a form of financial as-
25 sistance covered by clause **[(vii)]** of section

1 1508.1(q)(1) of title 40, Code of Federal Regula-
2 tions.

3 (h) LOANS.—

4 **[(1) INTEREST.—**The rate of interest to be
5 charged in connection with any loan made by the
6 Secretary to an eligible entity under subsection
7 (f)(1)(B) shall be fixed by the Secretary, taking into
8 consideration market yields on outstanding market-
9 able obligations of the United States of comparable
10 maturities as of the date of the loan.]

11 (i) ENVIRONMENTAL REVIEW PROCESS.—

12 (1) JOINT LEAD AGENCIES.—Nothing in this
13 section precludes another Federal agency from being
14 a joint lead agency with the Department in accord-
15 ance with regulations promulgated under the Na-
16 tional Environmental Policy Act of 1969 (42 U.S.C.
17 4321 et seq.).

18 (2) EFFECT OF AUTHORITY.—Except as pro-
19 vided in subsection (g)(8)(B), nothing in this section
20 affects or limits the application of, or any obligation
21 to comply with, any requirement of an environmental
22 law of the United States, including the National En-
23 vironmental Policy Act of 1969 (42 U.S.C. 4321 et
24 seq.).

1 (3) COST RECOVERY.—The head of any Federal
2 agency may accept funds from an eligible entity to
3 cover the costs of completing an environmental re-
4 view process relating to the facilitation of an eligible
5 project under this section.

6 (j) CERTIFICATION.—Prior to taking action to facili-
7 tate an eligible project under subparagraph (A) or (B) of
8 subsection (f)(1), the Secretary shall certify that—

9 (1) the eligible project is in the public interest;

10 (2) the eligible project is unlikely to be con-
11 structed in as timely a manner or with as much
12 transmission capacity in the absence of facilitation
13 under this section, including with respect to an eligi-
14 ble project for which a Federal investment tax credit
15 may be allowed; and

16 (3) it is reasonable to expect that the proceeds
17 from the eligible project will be adequate, as applica-
18 ble—

19 (A) to recover the cost of a capacity con-
20 tract entered into under subsection (f)(1)(A); or

21 (B) to repay a loan provided under sub-
22 section (f)(1)(B).

23 (k) OTHER AUTHORITIES, LIMITATIONS, AND EF-
24 fects.—

1 (1) PARTICIPATION.—The Secretary may per-
2 mit other entities to participate in the financing,
3 construction, and ownership of eligible projects fa-
4 cilitated under this section.

5 (2) OPERATIONS AND MAINTENANCE.—Facilita-
6 tion by the Secretary of an eligible project under
7 this section does not create any obligation on the
8 part of the Secretary to operate or maintain the eli-
9 gible project.

10 (3) FEDERAL FACILITIES.—For purposes of
11 cost recovery under subsection (e)(5) and repayment
12 of a loan issued under subsection (f)(1)(B), each eli-
13 gible project facilitated by the Secretary through the
14 use of a capacity contract or the issuance of a loan
15 under this section shall be treated as separate and
16 distinct from—

17 (A) each other eligible project; and

18 (B) all other Federal power and trans-
19 mission facilities.

20 (4) EFFECT ON ANCILLARY SERVICES AUTHOR-
21 ITY AND OBLIGATIONS.—Nothing in this section con-
22 fers on the Secretary or any Federal power mar-
23 keting administration any additional authority or ob-
24 ligation to provide ancillary services to users of

1 transmission facilities constructed or upgraded
2 under this section.

3 (5) EFFECT ON WESTERN AREA POWER ADMIN-
4 STRATION PROJECTS.—Nothing in this section af-
5 fects—

6 (A) any pending project application before
7 the Western Area Power Administration under
8 section 301 of the Hoover Power Plant Act of
9 1984 (42 U.S.C. 16421a); or

10 (B) any agreement entered into by the
11 Western Power Administration under that sec-
12 tion.

13 (6) THIRD-PARTY FINANCE.—Nothing in this
14 section precludes an eligible project facilitated under
15 this section from being eligible as a project under
16 section 1222 of the Energy Policy Act of 2005 (42
17 U.S.C. 16421).

18 (7) LIMITATION ON LOANS.—An eligible project
19 may not be the subject of both—

20 (A) a loan under subsection (f)(1)(B); and

21 (B) a Federal loan under section 301 of
22 the Hoover Power Plant Act of 1984 (42
23 U.S.C. 16421a).

24 (8) CONSIDERATIONS.—In evaluating eligible
25 projects for possible facilitation under this section,

1 the Secretary shall prioritize projects that, to the ex-
2 tent practicable—

3 (A) use technology that enhances the ca-
4 pacity, efficiency, or reliability of an electric
5 power transmission system, including hardware
6 or software that enables dynamic line ratings,
7 advanced power flow control, or grid topology
8 optimization;

9 (B) will improve the resiliency and reli-
10 ability of an electric power transmission system;

11 (C) facilitate interregional transmission
12 projects that support strong and equitable eco-
13 nomic growth; and

14 (D) contribute to national or subnational
15 goals to lower electricity sector greenhouse gas
16 emissions.

17 **SEC. 1008. DEPLOYMENT OF TECHNOLOGIES TO ENHANCE**
18 **GRID FLEXIBILITY.**

19 (a) IN GENERAL.—Section 1306 of the Energy Inde-
20 pendence and Security Act of 2007 (42 U.S.C. 17386) is
21 amended—

22 (1) in subsection (b)—

23 (A) in the matter preceding paragraph (1),
24 by striking “the date of enactment of this Act”

1 and inserting “the date of enactment of the En-
2 ergy Infrastructure Act”;

3 (B) by redesignating paragraph (9) as
4 paragraph (13); and

5 (C) by inserting after paragraph (8) the
6 following:

7 “(9) In the case of data analytics that enable
8 software to engage in Smart Grid functions, the doc-
9 umented purchase costs of the data analytics.

10 “(10) In the case of buildings, the documented
11 expenses for devices and software that allow build-
12 ings to engage in Smart Grid functions.

13 “(11) In the case of utility communications,
14 operational fiber and wireless broadband commu-
15 nications networks to enable data flow between dis-
16 tribution system components.

17 “(12) In the case of extreme weather or natural
18 disasters, such as wildfires, the ability to redirect or
19 shut off power to minimize blackouts and avoid fur-
20 ther damage.”; and

21 (2) in subsection (d)—

22 (A) by redesignating paragraph (9) as
23 paragraph (13); and

24 (B) by inserting after paragraph (8) the
25 following:

1 “(9) The ability to use data analytics and soft-
2 ware-as-service to provide flexibility by improving
3 the visibility of the electrical system to grid opera-
4 tors that can help quickly rebalance the electrical
5 system with autonomous controls.

6 “(10) The ability to facilitate the aggregation
7 or integration of distributed energy resources to
8 serve as assets for the grid.

9 “(11) The ability to provide energy storage to
10 meet fluctuating electricity demand, provide voltage
11 support, and integrate intermittent generation
12 sources.

13 “(12) The ability to anticipate and mitigate im-
14 pacts of extreme weather events or natural disasters
15 on grid resiliency.”.

16 (b) APPROPRIATIONS.—In addition to amounts other-
17 wise made available, there is appropriated to the Secretary
18 to carry out the Smart Grid Investment Matching Grant
19 Program established under section 1306(a) of the Energy
20 Independence and Security Act of 2007 (42 U.S.C.
21 17386(a)), out of any amounts in the Treasury not other-
22 wise appropriated, \$3,000,000,000 for fiscal year 2022,
23 to remain available through September 30, 2026.

1 **SEC. 1009. STATE ENERGY SECURITY PLANS.**

2 (a) IN GENERAL.—Part D of title III of the Energy
3 Policy and Conservation Act (42 U.S.C. 6321 et seq.) is
4 amended—

5 (1) in section 361—

6 (A) by striking the section designation and
7 heading and all that follows through “The Con-
8 gress” and inserting the following:

9 **“SEC. 361. FINDINGS; PURPOSE; DEFINITIONS.**

10 “(a) FINDINGS.—Congress”.

11 (B) in subsection (b), by striking “(b) It
12 is” and inserting the following:

13 “(b) PURPOSE.—It is”; and

14 (C) by adding at the end the following:

15 “(c) DEFINITIONS.—In this part:”;

16 (2) in section 366—

17 (A) in paragraph (3)(B)(i), by striking
18 “approved under section 367, and” ; and insert-
19 ing “; and”;

20 (B) in each of paragraphs (1) through (8),
21 by inserting a paragraph heading, the text of
22 which is comprised of the term defined in the
23 paragraph; and

24 (C) by redesignating paragraphs (6) and
25 (7) as paragraphs (7) and (6), respectively, and

1 moving the paragraphs so as to appear in nu-
2 merical order;

3 (3) by moving paragraphs (1) through (8) of
4 section 366 (as so redesignated) so as to appear
5 after subsection (c) of section 361 (as designated by
6 paragraph (1)(D)); and

7 (4) by amending section 366 to read as follows:

8 **“SEC. 366. STATE ENERGY SECURITY PLANS.**

9 “(a) DEFINITIONS.—In this section:

10 “(1) BULK-POWER SYSTEM.—The term ‘bulk-
11 power system’ has the meaning given the term in
12 section 215(a) of the Federal Power Act (16 U.S.C.
13 824o(a)).

14 “(2) STATE ENERGY SECURITY PLAN.—The
15 term ‘State energy security plan’ means a State en-
16 ergy security plan described in subsection (b).

17 “(b) FINANCIAL ASSISTANCE FOR STATE ENERGY
18 SECURITY PLANS.—Federal financial assistance made
19 available to a State under this part may be used for the
20 development, implementation, review, and revision of a
21 State energy security plan that—

22 “(1) assesses the existing circumstances in the
23 State; and

1 “(2) proposes methods to strengthen the ability
2 of the State, in consultation with owners and opera-
3 tors of energy infrastructure in the State—

4 “(A) to secure the energy infrastructure of
5 the State against all physical and cybersecurity
6 threats;

7 “(B)(i) to mitigate the risk of energy sup-
8 ply disruptions to the State; and

9 “(ii) to enhance the response to, and recov-
10 ery from, energy disruptions; and

11 “(C) to ensure that the State has reliable,
12 secure, and resilient energy infrastructure.

13 “(c) CONTENTS OF PLAN.—A State energy security
14 plan shall—

15 “(1) address all energy sources and regulated
16 and unregulated energy providers;

17 “(2) provide a State energy profile, including
18 an assessment of energy production, transmission,
19 distribution, and end-use;

20 “(3) address potential hazards to each energy
21 sector or system, including—

22 “(A) physical threats and vulnerabilities;
23 and

24 “(B) cybersecurity threats and
25 vulnerabilities;

1 “(4) provide a risk assessment of energy infra-
2 structure and cross-sector interdependencies;

3 “(5) provide a risk mitigation approach to en-
4 hance reliability and end-use resilience; and

5 “(6)(A) address—

6 “(i) multi-State and regional coordination,
7 planning, and response; and

8 “(ii) coordination with Indian Tribes with
9 respect to planning and response; and

10 “(B) to the extent practicable, encourage mu-
11 tual assistance in cyber and physical response plans.

12 “(d) COORDINATION.—In developing or revising a
13 State energy security plan, the State energy office of the
14 State shall coordinate, to the extent practicable, with—

15 “(1) the public utility or service commission of
16 the State;

17 “(2) energy providers from the private and pub-
18 lic sectors; and

19 “(3) other entities responsible for—

20 “(A) maintaining fuel or electric reliability;

21 and

22 “(B) securing energy infrastructure.

23 “(e) FINANCIAL ASSISTANCE.—A State is not eligible
24 to receive Federal financial assistance under this part for
25 any purpose for a fiscal year unless the Governor of the

1 State submits to the Secretary, with respect to that fiscal
2 year—

3 “(1) a State energy security plan that meets
4 the requirements of subsection (c); or

5 “(2) after an annual review, carried out by the
6 Governor, of a State energy security plan—

7 “(A) any necessary revisions to the State
8 energy security plan; or

9 “(B) a certification that no revisions to the
10 State energy security plan are necessary.

11 “(f) TECHNICAL ASSISTANCE.—On request of the
12 Governor of a State, the Secretary, in consultation with
13 the Secretary of Homeland Security, may provide informa-
14 tion, technical assistance, and other assistance in the de-
15 velopment, implementation, or revision of a State energy
16 security plan.

17 “(g) REQUIREMENT.—Each State receiving Federal
18 financial assistance under this part shall provide reason-
19 able assurance to the Secretary that the State has estab-
20 lished policies and procedures designed to assure that the
21 financial assistance will be used—

22 “(1) to supplement, and not to supplant, State
23 and local funds; and

24 “(2) to the maximum extent practicable, to in-
25 crease the amount of State and local funds that oth-

1 erwise would be available, in the absence of the Fed-
2 eral financial assistance, for the implementation of a
3 State energy security plan.

4 “(h) PROTECTION OF INFORMATION.—Information
5 provided to, or collected by, the Federal Government pur-
6 suant to this section the disclosure of which the Secretary
7 reasonably foresees could be detrimental to the physical
8 security or cybersecurity of any electric utility or the bulk-
9 power system—

10 “(1) shall be exempt from disclosure under sec-
11 tion 552(b)(3) of title 5, United States Code; and

12 “(2) shall not be made available by any Federal
13 agency, State, political subdivision of a State, or
14 Tribal authority pursuant to any Federal, State, po-
15 litical subdivision of a State, or Tribal law, respec-
16 tively, requiring public disclosure of information or
17 records.

18 “(i) SUNSET.—The requirements of this section shall
19 expire on October 31, 2025.”.

20 (b) CLERICAL AMENDMENTS.—The table of contents
21 of the Energy Policy and Conservation Act (Public Law
22 94–163; 89 Stat. 872) is amended—

23 (1) by striking the item relating to section 361
24 and inserting the following:

“Sec. 361. Findings; purpose; definitions.”; and

1 (2) by striking the item relating to section 366
2 and inserting the following:

“Sec. 366. State energy security plans.”.

3 (c) CONFORMING AMENDMENTS.—

4 (1) Section 509(i)(3) of the Housing and Urban
5 Development Act of 1970 (12 U.S.C. 1701z–8(i)(3))
6 is amended by striking “prescribed for such terms in
7 section 366 of the Energy Policy and Conservation
8 Act” and inserting “given the terms in section
9 361(c) of the Energy Policy and Conservation Act”.

10 (2) Section 363 of the Energy Policy and Con-
11 servation Act (42 U.S.C. 6323) is amended—

12 (A) by striking subsection (e); and

13 (B) by redesignating subsection (f) as sub-
14 section (e).

15 (3) Section 451(i)(3) of the Energy Conserva-
16 tion and Production Act (42 U.S.C. 6881(i)(3)) is
17 amended by striking “prescribed for such terms in
18 section 366 of the Federal Energy Policy and Con-
19 servation Act” and inserting “given the terms in sec-
20 tion 361(c) of the Energy Policy and Conservation
21 Act”.

22 **SEC. 1010. STATE ENERGY PROGRAM.**

23 (a) AUTHORIZATION OF APPROPRIATIONS.—Section
24 365 of the Energy Policy and Conservation Act (42 U.S.C.

1 6325) is amended by striking subsection (f) and inserting
2 the following:

3 “(f) AUTHORIZATION OF APPROPRIATIONS.—There
4 is authorized to be appropriated to carry out this part
5 \$90,000,000 for each of fiscal years 2022 through 2026.”.

6 (b) COLLABORATIVE TRANSMISSION SITING.—

7 (1) IN GENERAL.—Part D of title III of the
8 Energy Policy and Conservation Act (42 U.S.C.
9 6321 et seq.) is amended by adding at the end the
10 following:

11 **“SEC. 367. DIRECT APPROPRIATIONS.**

12 “In addition to amounts otherwise made available,
13 there is appropriated to the Secretary, out of any amounts
14 in the Treasury not otherwise appropriated, \$500,000,000
15 for fiscal year 2022, to remain available through Sep-
16 tember 30, 2029, for the State Energy Program under
17 this part for State, local, and Tribal governments to sup-
18 port transmission and distribution planning, including—

19 “(1) feasibility studies for transmission line
20 routes and alternatives;

21 “(2) preparation of necessary project design
22 and permits; and

23 “(3) outreach to affected stakeholders.”.

24 (2) CLERICAL AMENDMENT.—The table of con-
25 tents of the Energy Policy and Conservation Act

1 (Public Law 94–163; 89 Stat. 872) is amended by
2 adding at the end of the items relating to part D of
3 title III the following:

“Sec. 367. Direct appropriations.”.

4 (c) STATE ENERGY CONSERVATION PLANS.—Section
5 362(d) of the Energy Policy and Conservation Act (42
6 U.S.C. 6322(d)) is amended by striking paragraph (3) and
7 inserting the following:

8 “(3) programs to increase transportation energy
9 efficiency, including programs to help reduce carbon
10 emissions in the transportation sector by 2050 and
11 accelerate the use of alternative transportation fuels
12 for, and the electrification of, State government ve-
13 hicles, fleet vehicles, taxis and ridesharing services,
14 mass transit, school buses, and privately owned pas-
15 senger and medium- and heavy-duty vehicles;”.

16 **SEC. 1011. POWER MARKETING ADMINISTRATION TRANS-**
17 **MISSION BORROWING AUTHORITY.**

18 For the purposes of providing funds to assist in the
19 financing of the construction, acquisition, and replacement
20 of the transmission system of the Bonneville Power Ad-
21 ministration under the Pacific Northwest Electric Power
22 Planning and Conservation Act (16 U.S.C. 839 et seq.),
23 an additional \$2,000,000,000 in borrowing authority is
24 made available under the Federal Columbia River Trans-

1 mission System Act (16 U.S.C. 838 et seq.), to remain
2 outstanding at any 1 time.

3 **Subtitle B—Cybersecurity**

4 **SEC. 1101. ENHANCING GRID SECURITY THROUGH PUBLIC- 5 PRIVATE PARTNERSHIPS.**

6 (a) DEFINITIONS.—In this section:

7 (1) BULK-POWER SYSTEM; ELECTRIC RELI-
8 ABILITY ORGANIZATION.—The terms “bulk-power
9 system” and “Electric Reliability Organization” has
10 the meaning given the terms in section 215(a) of the
11 Federal Power Act (16 U.S.C. 824o(a)).

12 (2) ELECTRIC UTILITY; STATE REGULATORY
13 AUTHORITY.—The terms “electric utility” and
14 “State regulatory authority” have the meanings
15 given the terms in section 3 of the Federal Power
16 Act (16 U.S.C. 796).

17 (b) PROGRAM TO PROMOTE AND ADVANCE PHYSICAL
18 SECURITY AND CYBERSECURITY OF ELECTRIC UTILI-
19 TIES.—

20 (1) ESTABLISHMENT.—The Secretary, in con-
21 sultation with the Secretary of Homeland Security
22 and, as the Secretary determines to be appropriate,
23 the heads of other relevant Federal agencies, State
24 regulatory authorities, industry stakeholders, and

1 the Electric Reliability Organization, shall carry out
2 a program—

3 (A) to develop, and provide for voluntary
4 implementation of, maturity models, self-assess-
5 ments, and auditing methods for assessing the
6 physical security and cybersecurity of electric
7 utilities;

8 (B) to assist with threat assessment and
9 cybersecurity training for electric utilities;

10 (C) to provide technical assistance for elec-
11 tric utilities subject to the program;

12 (D) to provide training to electric utilities
13 to address and mitigate cybersecurity supply
14 chain management risks;

15 (E) to advance, in partnership with electric
16 utilities, the cybersecurity of third-party ven-
17 dors that manufacture components of the elec-
18 tric grid; and

19 (F) to increase opportunities for sharing
20 best practices and data collection within the
21 electric sector.

22 (2) SCOPE.—In carrying out the program under
23 paragraph (1), the Secretary shall—

24 (A) take into consideration—

1 (i) the different sizes of electric utili-
2 ties; and

3 (ii) the regions that electric utilities
4 serve;

5 (B) prioritize electric utilities with fewer
6 available resources due to size or region; and

7 (C) to the maximum extent practicable,
8 use and leverage—

9 (i) existing Department and Depart-
10 ment of Homeland Security programs; and

11 (ii) existing programs of the Federal
12 agencies determined to be appropriate
13 under paragraph (1).

14 (c) REPORT ON CYBERSECURITY OF DISTRIBUTION
15 SYSTEMS.—Not later than 1 year after the date of enact-
16 ment of this Act, the Secretary, in consultation with the
17 Secretary of Homeland Security and, as the Secretary de-
18 termines to be appropriate, the heads of other Federal
19 agencies, State regulatory authorities, and industry stake-
20 holders, shall submit to Congress a report that assesses—

21 (1) priorities, policies, procedures, and actions
22 for enhancing the physical security and cybersecurity
23 of electricity distribution systems, including behind-
24 the-meter generation, storage, and load management

1 devices, to address threats to, and vulnerabilities of,
2 electricity distribution systems; and

3 (2) the implementation of the priorities, poli-
4 cies, procedures, and actions assessed under para-
5 graph (1), including—

6 (A) an estimate of potential costs and ben-
7 efits of the implementation; and

8 (B) an assessment of any public-private
9 cost-sharing opportunities.

10 (d) PROTECTION OF INFORMATION.—Information
11 provided to, or collected by, the Federal Government pur-
12 suant to this section the disclosure of which the Secretary
13 reasonably foresees could be detrimental to the physical
14 security or cybersecurity of any electric utility or the bulk-
15 power system—

16 (1) shall be exempt from disclosure under sec-
17 tion 552(b)(3) of title 5, United States Code; and

18 (2) shall not be made available by any Federal
19 agency, State, political subdivision of a State, or
20 Tribal authority pursuant to any Federal, State, po-
21 litical subdivision of a State, or Tribal law, respec-
22 tively, requiring public disclosure of information or
23 records.

24 (e) SAVINGS PROVISION.—Nothing in this section af-
25 fects the authority, existing on the day before the date

1 of enactment of this Act, of any other Federal department
2 or agency, including the authority provided to the Sec-
3 retary of Homeland Security and the Director of the Cy-
4 bersecurity and Infrastructure Security Agency in title
5 XXII of the Homeland Security Act of 2002 (6 U.S.C.
6 651 et seq.).

7 **SEC. 1102. ENERGY CYBER SENSE PROGRAM.**

8 (a) DEFINITIONS.—In this section:

9 (1) BULK-POWER SYSTEM.—The term “bulk-
10 power system” has the meaning given the term in
11 section 215(a) of the Federal Power Act (16 U.S.C.
12 824o(a)).

13 (2) PROGRAM.—The term “program” means
14 the voluntary Energy Cyber Sense program estab-
15 lished under subsection (b).

16 (b) ESTABLISHMENT.—The Secretary, in consulta-
17 tion with the Secretary of Homeland Security and the
18 heads of other relevant Federal agencies, shall establish
19 a voluntary Energy Cyber Sense program to test the cy-
20 bersecurity of products and technologies intended for use
21 in the bulk-power system.

22 (c) PROGRAM REQUIREMENTS.—In carrying out sub-
23 section (b), the Secretary, in consultation with the Sec-
24 retary of Homeland Security and the heads of other rel-
25 evant Federal agencies, shall—

1 (1) establish a testing process under the pro-
2 gram to test the cybersecurity of products and tech-
3 nologies intended for use in the bulk-power system,
4 including products relating to industrial control sys-
5 tems and operational technologies, such as super-
6 visory control and data acquisition systems;

7 (2) for products and technologies tested under
8 the program, establish and maintain cybersecurity
9 vulnerability reporting processes and a related data-
10 base that are integrated with Federal vulnerability
11 coordination processes;

12 (3) provide technical assistance to electric utili-
13 ties, product manufacturers, and other electricity
14 sector stakeholders to develop solutions to mitigate
15 identified cybersecurity vulnerabilities in products
16 and technologies tested under the program;

17 (4) biennially review products and technologies
18 tested under the program for cybersecurity
19 vulnerabilities and provide analysis with respect to
20 how those products and technologies respond to and
21 mitigate cyber threats;

22 (5) develop guidance that is informed by anal-
23 ysis and testing results under the program for elec-
24 tric utilities for the procurement of products and
25 technologies;

1 (6) provide reasonable notice to, and solicit
2 comments from, the public prior to establishing or
3 revising the testing process under the program;

4 (7) oversee the testing of products and tech-
5 nologies under the program; and

6 (8) consider incentives to encourage the use of
7 analysis and results of testing under the program in
8 the design of products and technologies for use in
9 the bulk-power system.

10 (d) PROTECTION OF INFORMATION.—Information
11 provided to, or collected by, the Federal Government pur-
12 suant to this section the disclosure of which the Secretary
13 reasonably foresees could be detrimental to the physical
14 security or cybersecurity of any electric utility or the bulk-
15 power system—

16 (1) shall be exempt from disclosure under sec-
17 tion 552(b)(3) of title 5, United States Code; and

18 (2) shall not be made available by any Federal
19 agency, State, political subdivision of a State, or
20 Tribal authority pursuant to any Federal, State, po-
21 litical subdivision of a State, or Tribal law, respec-
22 tively, requiring public disclosure of information or
23 records.

24 (e) FEDERAL GOVERNMENT LIABILITY.—Nothing in
25 this section authorizes the commencement of an action

1 against the United States with respect to the testing of
2 a product or technology under the program.

3 (f) SAVINGS PROVISION.—Nothing in this section af-
4 fects the authority, existing on the day before the date
5 of enactment of this Act, of any other Federal department
6 or agency, including the authority provided to the Sec-
7 retary of Homeland Security and the Director of the Cy-
8 bersecurity and Infrastructure Security Agency in title
9 XXII of the Homeland Security Act of 2002 (6 U.S.C.
10 651 et seq.).

11 **SEC. 1103. INCENTIVES FOR ADVANCED CYBERSECURITY**
12 **TECHNOLOGY INVESTMENT.**

13 Part II of the Federal Power Act is amended by in-
14 serting after section 219 (16 U.S.C. 824s) the following:

15 **“SEC. 219A. INCENTIVES FOR CYBERSECURITY INVEST-**
16 **MENTS.**

17 “(a) DEFINITIONS.—In this section:

18 “(1) ADVANCED CYBERSECURITY TECH-
19 NOLOGY.—The term ‘advanced cybersecurity tech-
20 nology’ means any technology, operational capability,
21 or service, including computer hardware, software,
22 or a related asset, that enhances the security posture
23 of public utilities through improvements in the abil-
24 ity to protect against, detect, respond to, or recover
25 from a cybersecurity threat (as defined in section

1 102 of the Cybersecurity Act of 2015 (6 U.S.C.
2 1501)).

3 “(2) **ADVANCED CYBERSECURITY TECHNOLOGY**
4 **INFORMATION.**—The term ‘advanced cybersecurity
5 technology information’ means information relating
6 to advanced cybersecurity technology or proposed
7 advanced cybersecurity technology that is generated
8 by or provided to the Commission or another Fed-
9 eral agency.

10 “(b) **STUDY.**—Not later than 180 days after the date
11 of enactment of this section, the Commission, in consulta-
12 tion with the Secretary of Energy, the North American
13 Electric Reliability Corporation, the Electricity Subsector
14 Coordinating Council, and the National Association of
15 Regulatory Utility Commissioners, shall conduct a study
16 to identify incentive-based, including performance-based,
17 rate treatments for the transmission and sale of electric
18 energy subject to the jurisdiction of the Commission that
19 could be used to encourage—

20 “(1) investment by public utilities in advanced
21 cybersecurity technology; and

22 “(2) participation by public utilities in cyberse-
23 curity threat information sharing programs.

24 “(c) **INCENTIVE-BASED RATE TREATMENT.**—Not
25 later than 1 year after the completion of the study under

1 subsection (b), the Commission shall establish, by rule, in-
2 centive-based, including performance-based, rate treat-
3 ments for the transmission of electric energy in interstate
4 commerce and the sale of electric energy at wholesale in
5 interstate commerce by public utilities for the purpose of
6 benefitting consumers by encouraging—

7 “(1) investments by public utilities in advanced
8 cybersecurity technology; and

9 “(2) participation by public utilities in cyberse-
10 curity threat information sharing programs.

11 “(d) FACTORS FOR CONSIDERATION.—In issuing a
12 rule pursuant to this section, the Commission may provide
13 additional incentives beyond those identified in subsection
14 (c) in any case in which the Commission determines that
15 an investment in advanced cybersecurity technology or in-
16 formation sharing program costs will reduce cybersecurity
17 risks to—

18 “(1) defense critical electric infrastructure (as
19 defined in section 215A(a)) and other facilities sub-
20 ject to the jurisdiction of the Commission that are
21 critical to public safety, national defense, or home-
22 land security, as determined by the Commission in
23 consultation with—

24 “(A) the Secretary of Energy;

1 “(B) the Secretary of Homeland Security;

2 and

3 “(C) other appropriate Federal agencies;

4 and

5 “(2) facilities of small or medium-sized public
6 utilities with limited cybersecurity resources, as de-
7 termined by the Commission.

8 “(e) RATEPAYER PROTECTION.—

9 “(1) IN GENERAL.—Any rate approved under a
10 rule issued pursuant to this section, including any
11 revisions to that rule, shall be subject to the require-
12 ments of sections 205 and 206 that all rates,
13 charges, terms, and conditions—

14 “(A) shall be just and reasonable; and

15 “(B) shall not be unduly discriminatory or
16 preferential.

17 “(2) PROHIBITION OF DUPLICATE RECOVERY.—

18 Any rule issued pursuant to this section shall pre-
19 clude rate treatments that allow unjust and unrea-
20 sonable double recovery for advanced cybersecurity
21 technology.

22 “(f) SINGLE-ISSUE RATE FILINGS.—The Commis-
23 sion shall permit public utilities to apply for incentive-
24 based rate treatment under a rule issued under this sec-
25 tion on a single-issue basis by submitting to the Commis-

1 sion a tariff schedule under section 205 that permits re-
2 covery of costs and incentives over the depreciable life of
3 the applicable assets, without regard to changes in receipts
4 or other costs of the public utility.

5 “(g) PROTECTION OF INFORMATION.—Advanced cy-
6 bersecurity technology information that is provided to,
7 generated by, or collected by the Federal Government
8 under subsection (b), (c), or (f) shall be considered to be
9 critical electric infrastructure information under section
10 215A.”.

11 **SEC. 1104. RURAL AND MUNICIPAL UTILITY ADVANCED CY-**
12 **BERSECURITY GRANT AND TECHNICAL AS-**
13 **SISTANCE PROGRAM.**

14 (a) DEFINITIONS.—In this section:

15 (1) **ADVANCED CYBERSECURITY TECH-**
16 **NOLOGY.**—The term “advanced cybersecurity tech-
17 nology” means any technology, operational capa-
18 bility, or service, including computer hardware, soft-
19 ware, or a related asset, that enhances the security
20 posture of electric utilities through improvements in
21 the ability to protect against, detect, respond to, or
22 recover from a cybersecurity threat (as defined in
23 section 102 of the Cybersecurity Act of 2015 (6
24 U.S.C. 1501)).

1 (2) BULK-POWER SYSTEM.—The term “bulk-
2 power system” has the meaning given the term in
3 section 215(a) of the Federal Power Act (16 U.S.C.
4 824o(a)).

5 (3) ELIGIBLE ENTITY.—The term “eligible enti-
6 ty” means—

7 (A) a rural electric cooperative;

8 (B) a utility owned by a political subdivi-
9 sion of a State, such as a municipally owned
10 electric utility;

11 (C) a utility owned by any agency, author-
12 ity, corporation, or instrumentality of 1 or more
13 political subdivisions of a State;

14 (D) a not-for-profit entity that is in a part-
15 nership with not fewer than 6 entities described
16 in subparagraph (A), (B), or (C); and

17 (E) an investor-owned electric utility that
18 sells less than 4,000,000 megawatt hours of
19 electricity per year.

20 (4) PROGRAM.—The term “Program” means
21 the Rural and Municipal Utility Advanced Cyberse-
22 curity Grant and Technical Assistance Program es-
23 tablished under subsection (b).

24 (b) ESTABLISHMENT.—Not later than 180 days after
25 the date of enactment of this Act, the Secretary, in con-

1 sultation with the Secretary of Homeland Security, the
2 Federal Energy Regulatory Commission, the North Amer-
3 ican Electric Reliability Corporation, and the Electricity
4 Subsector Coordinating Council, shall establish a program,
5 to be known as the “Rural and Municipal Utility Advanced
6 Cybersecurity Grant and Technical Assistance Program”,
7 to provide grants and technical assistance to, and enter
8 into cooperative agreements with, eligible entities to pro-
9 tect against, detect, respond to, and recover from cyberse-
10 curity threats.

11 (c) OBJECTIVES.—The objectives of the Program
12 shall be—

13 (1) to deploy advanced cybersecurity tech-
14 nologies for electric utility systems; and

15 (2) to increase the participation of eligible enti-
16 ties in cybersecurity threat information sharing pro-
17 grams.

18 (d) AWARDS.—

19 (1) IN GENERAL.—The Secretary—

20 (A) shall award grants and provide tech-
21 nical assistance under the Program to eligible
22 entities on a competitive basis;

23 (B) shall develop criteria and a formula for
24 awarding grants and providing technical assist-
25 ance under the Program;

1 (C) may enter into cooperative agreements
2 with eligible entities that can facilitate the ob-
3 jectives described in subsection (c); and

4 (D) shall establish a process to ensure that
5 all eligible entities are informed about and can
6 become aware of opportunities to receive grants
7 or technical assistance under the Program.

8 (2) PRIORITY FOR GRANTS AND TECHNICAL AS-
9 SISTANCE.—In awarding grants and providing tech-
10 nical assistance under the Program, the Secretary
11 shall give priority to an eligible entity that, as deter-
12 mined by the Secretary—

13 (A) has limited cybersecurity resources;

14 (B) owns assets critical to the reliability of
15 the bulk-power system; or

16 (C) owns defense critical electric infra-
17 structure (as defined in section 215A(a) of the
18 Federal Power Act (16 U.S.C. 824o–1(a))).

19 (e) PROTECTION OF INFORMATION.—Information
20 provided to, or collected by, the Federal Government pur-
21 suant to this section the disclosure of which the Secretary
22 reasonably foresees could be detrimental to the physical
23 security or cybersecurity of any electric utility or the bulk-
24 power system—

1 (1) shall be exempt from disclosure under sec-
2 tion 552(b)(3) of title 5, United States Code; and

3 (2) shall not be made available by any Federal
4 agency, State, political subdivision of a State, or
5 Tribal authority pursuant to any Federal, State, po-
6 litical subdivision of a State, or Tribal law, respec-
7 tively, requiring public disclosure of information or
8 records.

9 (f) APPROPRIATIONS.—In addition to amounts other-
10 wise made available, there is appropriated to the Secretary
11 to carry out this section, out of any amounts in the Treas-
12 ury not otherwise appropriated, \$50,000,000 for each of
13 fiscal years 2022 through 2026.

14 **SEC. 1105. ENHANCED GRID SECURITY.**

15 (a) DEFINITIONS.—In this section:

16 (1) ELECTRIC UTILITY.—The term “electric
17 utility” has the meaning given the term in section
18 3 of the Federal Power Act (16 U.S.C. 796).

19 (2) E-ISAC.—The term “E-ISAC” means the
20 Electricity Information Sharing and Analysis Center.

21 (b) CYBERSECURITY FOR THE ENERGY SECTOR RE-
22 SEARCH, DEVELOPMENT, AND DEMONSTRATION PRO-
23 GRAM.—

24 (1) IN GENERAL.—The Secretary, in consulta-
25 tion with the Secretary of Homeland Security and,

1 as determined appropriate, other Federal agencies,
2 the energy sector, the States, and other stake-
3 holders, shall develop and carry out a program—

4 (A) to develop advanced cybersecurity ap-
5 plications and technologies for the energy sec-
6 tor—

7 (i) to identify and mitigate
8 vulnerabilities, including—

9 (I) dependencies on other critical
10 infrastructure; and

11 (II) impacts from weather and
12 fuel supply; and

13 (ii) to advance the security of field de-
14 vices and third-party control systems, in-
15 cluding—

16 (I) systems for generation, trans-
17 mission, distribution, end use, and
18 market functions;

19 (II) specific electric grid elements
20 including advanced metering, demand
21 response, distribution, generation, and
22 electricity storage;

23 (III) forensic analysis of infected
24 systems; and

25 (IV) secure communications;

1 (B) to leverage electric grid architecture as
2 a means to assess risks to the energy sector, in-
3 cluding by implementing an all-hazards ap-
4 proach to communications infrastructure, con-
5 trol systems architecture, and power systems
6 architecture;

7 (C) to perform pilot demonstration projects
8 with the energy sector to gain experience with
9 new technologies; and

10 (D) to develop workforce development cur-
11 ricula for energy sector-related cybersecurity.

12 (2) APPROPRIATIONS.—In addition to amounts
13 otherwise made available, there is appropriated to
14 the Secretary to carry out this subsection, out of any
15 amounts in the Treasury not otherwise appropriated,
16 \$50,000,000 for each of fiscal years 2022 through
17 2026.

18 (c) ENERGY SECTOR OPERATIONAL SUPPORT FOR
19 CYBERRESILIENCE PROGRAM.—

20 (1) IN GENERAL.—The Secretary may develop
21 and carry out a program—

22 (A) to enhance and periodically test—

23 (i) the emergency response capabilities
24 of the Department; and

1 (ii) the coordination of the Depart-
2 ment with other agencies, the National
3 Laboratories, and private industry;

4 (B) to expand cooperation of the Depart-
5 ment with the intelligence community for en-
6 ergy sector-related threat collection and anal-
7 ysis;

8 (C) to enhance the tools of the Department
9 and E-ISAC for monitoring the status of the
10 energy sector;

11 (D) to expand industry participation in E-
12 ISAC; and

13 (E) to provide technical assistance to small
14 electric utilities for purposes of assessing
15 cybermaturity levels.

16 (2) APPROPRIATIONS.—In addition to amounts
17 otherwise made available, there is appropriated to
18 the Secretary to carry out this subsection, out of any
19 amounts in the Treasury not otherwise appropriated,
20 \$10,000,000 for each of fiscal years 2022 through
21 2026.

22 (d) MODELING AND ASSESSING ENERGY INFRA-
23 STRUCTURE RISK.—

1 (1) IN GENERAL.—The Secretary shall develop
2 and carry out an advanced energy security program
3 to secure energy networks, including—

4 (A) electric networks;

5 (B) natural gas networks; and

6 (C) oil exploration, transmission, and deliv-
7 ery networks.

8 (2) SECURITY AND RESILIENCY OBJECTIVE.—

9 The objective of the program developed under para-
10 graph (1) is to increase the functional preservation
11 of electric grid operations or natural gas and oil op-
12 erations in the face of natural and human-made
13 threats and hazards, including electric magnetic
14 pulse and geomagnetic disturbances.

15 (3) ELIGIBLE ACTIVITIES.—In carrying out the
16 program developed under paragraph (1), the Sec-
17 retary may—

18 (A) develop capabilities to identify
19 vulnerabilities and critical components that pose
20 major risks to grid security if destroyed or im-
21 paired;

22 (B) develop a maturity model for physical
23 security and cybersecurity;

24 (C) conduct exercises and assessments to
25 identify and mitigate vulnerabilities to the elec-

1 tric grid, including providing mitigation rec-
2 ommendations; and

3 (D) provide technical assistance to States
4 and other entities for standards and risk anal-
5 ysis.

6 (4) AUTHORIZATION OF APPROPRIATIONS.—In
7 addition to amounts otherwise made available, there
8 is appropriated to the Secretary to carry out this
9 subsection, out of any amounts in the Treasury not
10 otherwise appropriated, \$10,000,000 for each of fis-
11 cal years 2022 through 2026.

12 **Subtitle C—Broadband**

13 **SEC. 1201. ENABLING MIDDLE MILE BROADBAND INFRA-** 14 **STRUCTURE.**

15 (a) DEFINITIONS.—In this section:

16 (1) ANCHOR INSTITUTION.—The term “anchor
17 institution” means any of the following:

18 (A) A school.

19 (B) A library.

20 (C) A healthcare provider.

21 (D) A community college.

22 (E) Any other community organization
23 that makes essential broadband service avail-
24 able to the community.

1 (2) ELIGIBLE ENTITY.—The term “eligible enti-
2 ty” means an electric utility (as defined in section
3 3 of the Federal Power Act (16 U.S.C. 796)).

4 (3) LAST MILE BROADBAND INFRASTRUC-
5 TURE.—The term “last mile broadband infrastruc-
6 ture” means broadband infrastructure that connects
7 directly to an end-user location.

8 (4) MIDDLE MILE BROADBAND INFRASTRUC-
9 TURE.—

10 (A) IN GENERAL.—The term “middle mile
11 broadband infrastructure” means any
12 broadband infrastructure that does not connect
13 directly to an end-user location (other than an
14 anchor institution).

15 (B) INCLUSIONS.—The term “middle mile
16 broadband infrastructure” includes leased dark
17 fiber, interoffice lit transport, lit backhaul, lit
18 transport connectivity to data centers or inter-
19 net exchange points, special access transport,
20 and other similar services.

21 (5) PROGRAM.—The term “program” means
22 the program established under subsection (b)(1).

23 (6) UNSERVED AREA.—The term “unserved
24 area” means an area that, as determined in accord-
25 ance with the maps created under section 802(e)(1)

1 of the Communications Act of 1934 (47 U.S.C.
2 642(c)(1)), does not have access to broadband serv-
3 ice with—

4 (A) a download speed of at least 25 mega-
5 bits per second; and

6 (B) an upload speed of at least 3 megabits
7 per second.

8 (b) ESTABLISHMENT OF PROGRAM.—

9 (1) IN GENERAL.—Not later than 180 days
10 after the date of enactment of this Act, the Sec-
11 retary shall establish a program under which the
12 Secretary shall provide grants, loans, and loan guar-
13 antees to eligible entities for the construction, im-
14 provement, or acquisition of middle mile broadband
15 infrastructure.

16 (2) PURPOSE.—The purpose of the program
17 shall be to encourage the expansion and extension of
18 middle mile broadband infrastructure to reduce the
19 cost to connect unserved areas to the backbone of
20 the internet and thereby reduce the cost of deploying
21 last mile broadband infrastructure.

22 (c) ELIGIBLE PROJECTS.—The Secretary may pro-
23 vide a grant, loan, or loan guarantee under the program
24 for a middle mile broadband infrastructure project de-
25 scribed in an application submitted under subsection (d)

1 only if the Secretary determines that, as of the date on
2 which the application is submitted, the proposed middle
3 mile broadband network associated with the middle mile
4 broadband infrastructure project will be capable of sup-
5 porting retail broadband service for the residents and busi-
6 nesses within the proposed service territory.

7 (d) APPLICATIONS.—An eligible entity desiring a
8 grant, loan, or loan guarantee under the program shall
9 submit to the Secretary an application at such time, in
10 such manner, and containing such information as the Sec-
11 retary may require, including—

12 (1) a plan to ensure the viability of the middle
13 mile broadband infrastructure project proposed in
14 the application by—

15 (A) connecting, assisting with connecting,
16 or enabling the connection of retail broadband
17 systems within the proposed service territory to
18 the middle mile broadband infrastructure
19 project in an affordable and economically com-
20 petitive manner;

21 (B) obtaining contingent agreements from
22 not fewer than 1 provider of last mile
23 broadband infrastructure to lease or buy capac-
24 ity prior to the date on which the grant, loan,
25 or loan guarantee is provided; and

1 (C) leasing dark fiber capacity or selling
2 services on a non-discriminatory basis; and

3 (2) a demonstration that the middle mile
4 broadband infrastructure to be constructed, im-
5 proved, or acquired pursuant to the project will, in
6 coordination with other projects that serve unserved
7 areas, reduce the cost to connect unserved areas to
8 broadband service.

9 (e) SELECTION PRIORITY.—In selecting projects for
10 which to provide grants, loans, or loan guarantees under
11 the program, the Secretary shall give priority to projects
12 that leverage existing rights-of-way, assets, and infra-
13 structure to minimize financial, regulatory, and permitting
14 challenges.

15 (f) REQUIREMENT.—An eligible entity selected to re-
16 ceive a grant, loan, or loan guarantee under the program
17 shall agree—

18 (1) to complete build-out of the middle mile
19 broadband infrastructure project described in the
20 application by the date that is 5 years after the date
21 on which proceeds from the applicable grant or loan
22 are first made available to the eligible entity; and

23 (2) to comply with all requirements imposed by
24 the Secretary.

25 (g) GRANTS.—

1 (1) LIMITATION.—A grant provided under the
2 program may not exceed 50 percent of the total cost
3 of the project for which the grant is awarded.

4 (2) PROHIBITION.—The Secretary may not re-
5 quire the recipient of a grant under the program, or
6 any sublessee of the middle mile broadband infra-
7 structure constructed, improved, or acquired pursu-
8 ant to the grant, to provide to the Federal Govern-
9 ment a security interest in the applicable middle
10 mile broadband infrastructure.

11 (h) TERMS, CONDITIONS, AND ADEQUACY OF SECU-
12 RITY FOR LOANS AND LOAN GUARANTEES.—

13 (1) IN GENERAL.—All loans and loan guaran-
14 tees provided under the program shall be made sub-
15 ject to such terms, conditions, and adequacy of secu-
16 rity requirements as may be required by the Sec-
17 retary.

18 (2) SUBSTITUTE SECURITY.—If the middle mile
19 broadband infrastructure constructed, improved, or
20 acquired pursuant to a loan or loan guarantee pro-
21 vided under the program would not provide adequate
22 security due to long-term leasing arrangements, the
23 Secretary shall require substitute security in such
24 form and substance as are acceptable to the Sec-
25 retary.

1 (i) USE OF FUNDS BY REGULATED UTILITIES.—The
2 Secretary shall encourage regulated utilities to use funds
3 provided pursuant to a grant, loan, or loan guarantee
4 under the program as a supplement to the core utility cap-
5 ital investment plans of the regulated utility to facilitate
6 increased broadband connectivity to unserved areas in—

7 (1) the service territories of the regulated util-
8 ity; and

9 (2) nearby communities.

10 (j) APPROPRIATIONS.—In addition to amounts other-
11 wise made available, there is appropriated to the Secretary
12 to carry out this section, out of any amounts in the Treas-
13 ury not otherwise appropriated, \$100,000,000 for each of
14 fiscal years 2022 through 2026.

15 **TITLE II—SUPPLY CHAINS FOR** 16 **CLEAN ENERGY TECHNOLOGIES**

17 **SEC. 2001. EARTH MAPPING RESOURCES INITIATIVE.**

18 (a) DEFINITION OF CRITICAL MINERAL.—In this
19 section, the term “critical mineral” has the meaning given
20 the term in section 7002(a) of the Energy Act of 2020
21 (30 U.S.C. 1606(a)).

22 (b) ESTABLISHMENT.—There is established within
23 the United States Geological Survey an initiative, to be
24 known as the “Earth Mapping Resources Initiative” (re-
25 ferred to in this section as the “Initiative”).

1 (c) PURPOSE.—The purpose of the Initiative shall be
2 to accelerate efforts to carry out the fundamental re-
3 sources and mapping mission of the United States Geo-
4 logical Survey by—

5 (1) providing integrated topographic, geologic,
6 geochemical, and geophysical mapping;

7 (2) accelerating the integration and consolida-
8 tion of geospatial and resource data; and

9 (3) providing interpretation of subsurface and
10 above-ground mineral resources data.

11 (d) COOPERATIVE AGREEMENTS.—

12 (1) IN GENERAL.—In carrying out the Initia-
13 tive, the Director of the United States Geological
14 Survey may enter into cooperative agreements with
15 State geological surveys.

16 (2) EFFECT.—Nothing in paragraph (1) pre-
17 cludes the Director of the United States Geological
18 Survey from using existing contracting authorities in
19 carrying out the Initiative.

20 (e) COMPREHENSIVE MAPPING MODERNIZATION.—

21 (1) IN GENERAL.—Not later than 10 years
22 after the date of enactment of this Act, the Initiative
23 shall complete an initial comprehensive national
24 modern surface and subsurface mapping and data
25 integration effort.

1 (2) APPROACH.—In carrying out paragraph (1)
2 with regard to minerals, mineralization, and mineral
3 deposits, the Initiative shall focus on the full range
4 of minerals, using a whole ore body approach rather
5 than a single commodity approach, to emphasize all
6 of the recoverable critical minerals in a given surface
7 or subsurface deposit.

8 (3) PRIORITY.—In carrying out paragraph (1)
9 with regard to minerals, mineralization, and mineral
10 deposits, the Initiative shall prioritize mapping and
11 assessing critical minerals.

12 (4) INCLUSIONS.—In carrying out paragraph
13 (1), the Initiative shall—

14 (A) map and collect data for areas con-
15 taining mine waste to increase understanding of
16 above-ground critical mineral resources in pre-
17 viously disturbed areas; and

18 (B) provide for analysis of samples, includ-
19 ing samples within the National Geological and
20 Geophysical Data Preservation Program estab-
21 lished under section 351(b) of the Energy Pol-
22 icy Act of 2005 (42 U.S.C. 15908(b)) for the
23 occurrence of critical minerals.

24 (f) AVAILABILITY.—The Initiative shall make the
25 geospatial data and metadata gathered by the Initiative

1 under subsection (e)(1) electronically publicly accessible
2 on an ongoing basis.

3 (g) INTEGRATION OF DATA SOURCES.—The Initia-
4 tive shall integrate data sources, including data from—

5 (1) the National Cooperative Geologic Mapping
6 Program established by section 4(a)(1) of the Na-
7 tional Geologic Mapping Act of 1992 (43 U.S.C.
8 31c(a)(1));

9 (2) the National Geological and Geophysical
10 Data Preservation Program established under sec-
11 tion 351(b) of the Energy Policy Act of 2005 (42
12 U.S.C. 15908(b));

13 (3) the USMIN Mineral Deposit Database of
14 the United States Geological Survey;

15 (4) the 3D Elevation Program established
16 under section 5(a) of the National Landslide Pre-
17 paredness Act (43 U.S.C. 3104(a)); and

18 (5) other relevant sources, including sources
19 providing geothermal resources data.

20 (h) APPROPRIATIONS.—In addition to amounts other-
21 wise made available, there is appropriated to the Secretary
22 to carry out this section, out of any amounts in the Treas-
23 ury not otherwise appropriated, \$64,000,000 for each of
24 fiscal years 2022 through 2026, to remain available until
25 expended.

1 **SEC. 2002. NATIONAL COOPERATIVE GEOLOGIC MAPPING**
2 **PROGRAM.**

3 (a) IN GENERAL.—Section 4(d) of the National Geo-
4 logic Mapping Act of 1992 (43 U.S.C. 31c(d)) is amended
5 by adding at the end the following:

6 “(4) ABANDONED MINE LAND AND MINE WASTE
7 COMPONENT.—

8 “(A) IN GENERAL.—The geologic mapping
9 program shall include an abandoned mine land
10 and mine waste geologic mapping component,
11 the objective of which shall be to establish the
12 geologic framework of abandoned mine land
13 and other land containing mine waste deter-
14 mined to be vital to the economic, social, envi-
15 ronmental, or scientific welfare of the United
16 States.

17 “(B) MAPPING PRIORITIES.—For the com-
18 ponent described in subparagraph (A), the pri-
19 ority shall be mapping abandoned mine land
20 and other land containing mine waste where
21 multiple critical mineral (as defined in section
22 7002(a) of the Energy Act of 2020 (30 U.S.C.
23 1606(a))) and metal commodities are antici-
24 pated to be present, rather than single mineral
25 resources.”.

1 (b) AUTHORIZATION OF APPROPRIATIONS.—Section
2 9(a) of the National Geologic Mapping Act of 1992 (43
3 U.S.C. 31h(a)) is amended by striking “2023” and insert-
4 ing “2031”.

5 **SEC. 2003. NATIONAL GEOLOGICAL AND GEOPHYSICAL**
6 **DATA PRESERVATION PROGRAM.**

7 Section 351(b) of the Energy Policy Act of 2005 (42
8 U.S.C. 15908(b)) is amended—

9 (1) in paragraph (2), by striking “and” after
10 the semicolon;

11 (2) in paragraph (3), by striking the period at
12 the end and inserting “; and”; and

13 (3) by adding at the end the following:

14 “(4) to provide for preservation of samples to
15 track geochemical signatures from critical mineral
16 (as defined in section 7002(a) of the Energy Act of
17 2020 (30 U.S.C. 1606(a))) ore bodies for use in
18 provenance tracking frameworks.”.

19 **SEC. 2004. USGS ENERGY AND MINERALS RESEARCH FACIL-**
20 **ITY.**

21 (a) ESTABLISHMENT.—The Director of the United
22 States Geological Survey (referred to in this section as
23 “the Director”), shall fund, through a cooperative agree-
24 ment with an academic partner, the design, construction,

1 and tenant build-out of a facility to support energy and
2 minerals research and appurtenant associated structures.

3 (b) OWNERSHIP.—The United States Geological Sur-
4 vey shall retain ownership of the facility and associated
5 structures described in subsection (a).

6 (c) AGREEMENTS.—The Director may enter into
7 agreements with, and to collect and expend funds or in-
8 kind contributions from, academic, Federal, State, or
9 other tenants over the life of the facility described in sub-
10 section (a) for the purposes of—

- 11 (1) facility planning;
- 12 (2) design;
- 13 (3) maintenance;
- 14 (4) operation; or
- 15 (5) facility improvements.

16 (d) LEASES.—The Director may enter into a lease
17 or other agreement with the academic partner with which
18 the Director has entered into a cooperative agreement
19 under subsection (a), at no cost to the Federal Govern-
20 ment, to obtain land on which to construct the facility de-
21 scribed in that subsection for a term of not less than 99
22 years.

23 (e) REPORTS.—The Director shall submit to Con-
24 gress annual reports on—

- 25 (1) the facility described in subsection (a); and

1 (2) the authorities used under this section.

2 (f) APPROPRIATIONS.—In addition to amounts other-
3 wise made available, there is appropriated to the Secretary
4 of the Interior to carry out this section, out of any
5 amounts in the Treasury not otherwise appropriated,
6 \$167,000,000 for fiscal year 2022, to remain available
7 until expended.

8 **SEC. 2005. RARE EARTH ELEMENTS DEMONSTRATION FA-**
9 **CILITY.**

10 Section 7001 of the Energy Act of 2020 (42 U.S.C.
11 13344) is amended—

12 (1) in subsection (b), by inserting “and annu-
13 ally thereafter while the facility established under
14 subsection (c) remains in operation,” after “enact-
15 ment of this Act,”;

16 (2) by redesignating subsection (c) as sub-
17 section (d); and

18 (3) by inserting after subsection (b) the fol-
19 lowing:

20 “(c) RARE EARTH DEMONSTRATION FACILITY.—

21 “(1) ESTABLISHMENT.—In coordination with
22 the research program under subsection (a)(1)(A),
23 the Secretary shall fund, through an agreement with
24 an academic partner, the design, construction, and
25 build-out of a facility to demonstrate the feasibility

1 of a full-scale integrated rare earth element concen-
2 trator and refinery.

3 “(2) FACILITY ACTIVITIES.—The facility estab-
4 lished under paragraph (1) shall—

5 “(A) utilize acid mine drainage as a feed-
6 stock;

7 “(B) separate mixed rare earth oxides into
8 pure oxides of each rare earth element;

9 “(C) refine rare earth oxides into rare
10 earth metals; and

11 “(D) provide for separation of rare earth
12 oxides and refining into rare earth metals at a
13 single site.

14 “(3) APPROPRIATIONS.—In addition to
15 amounts otherwise made available, there is appro-
16 priated to the Secretary to carry out this subsection,
17 out of any amounts in the Treasury not otherwise
18 appropriated, \$140,000,000 for fiscal year 2022, to
19 remain available until expended.”.

20 **SEC. 2006. CRITICAL MINERALS SUPPLY CHAINS AND RELI-**
21 **ABILITY.**

22 (a) DEFINITION OF CRITICAL MINERAL.—In this
23 section, the term “critical mineral” has the meaning given
24 the term in section 7002(a) of the Energy Act of 2020
25 (30 U.S.C. 1606(a)).

1 (b) SENSE OF CONGRESS.—It is the sense of Con-
2 gress that—

3 (1) critical minerals are fundamental to the
4 economy, competitiveness, and security of the United
5 States;

6 (2) many critical minerals are only economic to
7 recover when combined with the production of a host
8 mineral;

9 (3) to the maximum extent practicable, the crit-
10 ical mineral needs of the United States should be
11 satisfied by minerals responsibly produced and recy-
12 cled in the United States; and

13 (4) the Federal permitting process has been
14 identified as an impediment to mineral production
15 and the mineral security of the United States.

16 (c) FEDERAL PERMITTING AND REVIEW PERFORM-
17 ANCE IMPROVEMENTS.—To improve the quality and time-
18 liness of Federal permitting and review processes with re-
19 spect to critical mineral production on Federal land, the
20 Secretary of the Interior, acting through the Director of
21 the Bureau of Land Management, and the Secretary of
22 Agriculture, acting through the Chief of the Forest Service
23 (referred to in this section as the “Secretaries”), to the
24 maximum extent practicable, shall complete the Federal
25 permitting and review processes with maximum efficiency

1 and effectiveness, while supporting vital economic growth,
2 by—

3 (1) establishing and adhering to timelines and
4 schedules for the consideration of, and final deci-
5 sions regarding, applications, operating plans, leases,
6 licenses, permits, and other use authorizations for
7 critical mineral-related activities on Federal land;

8 (2) establishing clear, quantifiable, and tem-
9 poral permitting performance goals and tracking
10 progress against those goals;

11 (3) engaging in early collaboration among agen-
12 cies, project sponsors, and affected stakeholders—

13 (A) to incorporate and address the inter-
14 ests of those parties; and

15 (B) to minimize delays;

16 (4) ensuring transparency and accountability by
17 using cost-effective information technology to collect
18 and disseminate information regarding individual
19 projects and agency performance;

20 (5) engaging in early and active consultation
21 with State, local, and Tribal governments—

22 (A) to avoid conflicts or duplication of ef-
23 fort;

24 (B) to resolve concerns; and

1 (C) to allow for concurrent, rather than se-
2 quential, reviews;

3 (6) providing demonstrable improvements in the
4 performance of Federal permitting and review proc-
5 esses, including lower costs and more timely deci-
6 sions;

7 (7) expanding and institutionalizing Federal
8 permitting and review process improvements that
9 have proven effective;

10 (8) developing mechanisms to better commu-
11 nicate priorities and resolve disputes among agencies
12 at the national, regional, State, and local levels; and

13 (9) developing other practices, such as
14 preapplication procedures.

15 (d) REVIEW AND REPORT.—Not later than 1 year
16 after the date of enactment of this Act, the Secretaries
17 shall submit to Congress a report that—

18 (1) identifies additional measures, including
19 regulatory and legislative proposals, if appropriate,
20 that would increase the timeliness of permitting ac-
21 tivities for the exploration and development of do-
22 mestic critical minerals;

23 (2) identifies options, including cost recovery
24 paid by permit applicants, for ensuring adequate
25 staffing and training of Federal entities and per-

1 sonnel responsible for the consideration of applica-
2 tions, operating plans, leases, licenses, permits, and
3 other use authorizations for critical mineral-related
4 activities on Federal land;

5 (3) quantifies the period of time typically re-
6 quired to complete each step associated with the de-
7 velopment and processing of applications, operating
8 plans, leases, licenses, permits, and other use au-
9 thorizations for critical mineral-related activities on
10 Federal land, including by—

11 (A) calculating the range, the mean, the
12 median, the variance, and other statistical
13 measures or representations of the period of
14 time; and

15 (B) taking into account other aspects that
16 affect the period of time that are outside the
17 control of the Executive branch, such as judicial
18 review, applicant decisions, or State and local
19 government involvement; and

20 (4) describes actions carried out pursuant to
21 subsection (c).

22 (e) **PERFORMANCE METRIC.**—Not later than 90 days
23 after the date of submission of the report under subsection
24 (d), and after providing public notice and an opportunity
25 to comment, the Secretaries, using as a baseline the period

1 of time quantified under paragraph (3) of that subsection,
2 shall develop and publish a performance metric for evalu-
3 ating the progress made by the Executive branch to expedite the permitting of activities that will increase explo-
4 ration for, and development of, domestic critical minerals,
5 while maintaining environmental standards.

7 (f) ANNUAL REPORTS.—Not later than the date on
8 which the President submits the first budget of the Presi-
9 dent under section 1105 of title 31, United States Code,
10 after publication of the performance metric required under
11 subsection (e), and annually thereafter, the Secretaries
12 shall submit to Congress a report that—

13 (1) summarizes the implementation of rec-
14 ommendations, measures, and options identified in
15 paragraphs (1) and (2) of subsection (d);

16 (2) using the performance metric developed
17 under subsection (e), describes progress made by the
18 Executive branch, as compared to the baseline devel-
19 oped pursuant to subsection (d)(3), in expediting the
20 permitting of activities that will increase exploration
21 for, and development of, domestic critical minerals;
22 and

23 (3) compares the United States to other coun-
24 tries in terms of permitting efficiency and any other

1 criteria relevant to the globally competitive critical
2 minerals industry.

3 (g) INDIVIDUAL PROJECTS.—Each year, using data
4 contained in the reports submitted under subsection (f),
5 the Director of the Office of Management and Budget
6 shall prioritize inclusion of individual critical mineral
7 projects on the website operated by the Office of Manage-
8 ment and Budget in accordance with section 1122 of title
9 31, United States Code.

10 **SEC. 2007. BATTERY PROCESSING AND MANUFACTURING.**

11 (a) DEFINITIONS.—In this section:

12 (1) ADVANCED BATTERY.—The term “advanced
13 battery” means a high-capacity battery that—

14 (A) has a robust battery cell and module;

15 and

16 (B) is used in energy storage applications,
17 including electric vehicles and the electric grid.

18 (2) ADVANCED BATTERY COMPONENT.—

19 (A) IN GENERAL.—The term “advanced
20 battery component” means a component of an
21 advanced battery.

22 (B) INCLUSIONS.—The term “advanced
23 battery component” includes materials, en-
24 hancements, enclosures, anodes, cathodes, elec-

1 trolytes, cells, and other associated technologies
2 that comprise an advanced battery.

3 (3) BATTERY MATERIAL.—The term “battery
4 material” means the raw and processed form of a
5 mineral, metal, chemical, or other material used in
6 an advanced battery component.

7 (4) ELIGIBLE ENTITY.—The term “eligible enti-
8 ty” means an entity described in any of paragraphs
9 (1) through (5) of section 989(b) of the Energy Pol-
10 icy Act of 2005 (42 U.S.C. 16353(b)).

11 (5) MANUFACTURING.—The term “manufac-
12 turing”, with respect to an advanced battery and an
13 advanced battery component, means the industrial
14 and chemical steps taken to produce that advanced
15 battery or advanced battery component, respectively.

16 (6) PROCESSING.—The term “processing”, with
17 respect to battery material, means the refining of
18 critical materials, including the treating, baking, and
19 coating processes used to convert raw products into
20 operable components of an advanced battery.

21 (7) RECYCLING.—The term “recycling” means
22 the recovery of critical materials from batteries to be
23 reused in similar applications, including the extract-
24 ing, processing, and recoating of battery materials
25 and advanced battery components.

1 (b) BATTERY MATERIAL PROCESSING GRANTS.—

2 (1) IN GENERAL.—Not later than 180 days
3 after the date of enactment of this Act, the Sec-
4 retary shall establish within the Office of Fossil En-
5 ergy a program, to be known as the “Battery Mate-
6 rial Processing Grant Program” (referred to in this
7 subsection as the “program”), under which the Sec-
8 retary shall award grants in accordance with this
9 subsection.

10 (2) PURPOSES.—The purposes of the program
11 are—

12 (A) to ensure that the United States has
13 a viable battery materials processing industry to
14 supply the North American battery supply
15 chain;

16 (B) to expand the capabilities of the
17 United States in advanced battery manufac-
18 turing; and

19 (C) to enhance national security by reduc-
20 ing the reliance of the United States on foreign
21 competitors for critical materials and tech-
22 nologies.

23 (3) GRANTS.—

1 (A) IN GENERAL.—Under the program,
2 the Secretary shall award grants to eligible en-
3 tities—

4 (i) to carry out a demonstration
5 project for the processing of battery mate-
6 rials;

7 (ii) to construct a new commercial-
8 scale battery material processing facility;
9 and

10 (iii) to retool, retrofit, or expand an
11 existing battery material processing facility
12 determined qualified by the Secretary.

13 (B) AMOUNT LIMITATION.—The amount of
14 a grant awarded under the program shall be
15 not less than—

16 (i) \$50,000,000 for a project de-
17 scribed in subparagraph (A)(i);

18 (ii) \$100,000,000 for a project de-
19 scribed in subparagraph (A)(ii); and

20 (iii) \$50,000,000 for a project de-
21 scribed in subparagraph (A)(iii).

22 (C) PRIORITY; CONSIDERATION.—In
23 awarding grants to eligible entities under the
24 program, the Secretary shall—

1 (i) give priority to an eligible entity

2 that—

3 (I) is located in the United
4 States; and

5 (II) deploys United States-owned
6 intellectual property and content; and

7 (ii) take into consideration whether a
8 project—

9 (I) provides workforce opportuni-
10 ties in low- and moderate-income com-
11 munities;

12 (II) encourages partnership with
13 universities and laboratories to spur
14 innovation and drive down costs; and

15 (III) takes into account green-
16 house gas emissions reductions and
17 energy efficient battery material proc-
18 essing opportunities.

19 (4) APPROPRIATIONS.—In addition to amounts
20 otherwise made available, there is appropriated to
21 the Secretary to carry out the program, out of any
22 amounts in the Treasury not otherwise appropriated,
23 \$3,000,000,000 for the period of fiscal years 2022
24 through 2026, to remain available until expended.

1 (c) BATTERY MANUFACTURING AND RECYCLING
2 GRANTS.—

3 (1) IN GENERAL.—Not later than 180 days
4 after the date of enactment of this Act, the Sec-
5 retary shall establish within the Office of Energy Ef-
6 ficiency and Renewable Energy a battery manufac-
7 turing and recycling grant program (referred to in
8 this subsection as the “program”).

9 (2) PURPOSE.—The purpose of the program is
10 to ensure that the United States has a viable domes-
11 tic manufacturing and recycling capability to sup-
12 port and sustain a North American battery supply
13 chain.

14 (3) GRANTS.—

15 (A) IN GENERAL.—Under the program,
16 the Secretary shall award grants to eligible en-
17 tities—

18 (i) to carry out demonstration projects
19 for advanced battery component manufac-
20 turing, advanced battery manufacturing,
21 and recycling;

22 (ii) to construct a new commercial-
23 scale advanced battery component manu-
24 facturing, advanced battery manufacturing,
25 or recycling facility; and

1 (iii) to retool, retrofit, or expand an
2 existing facility, determined qualified by
3 the Secretary, for advanced battery compo-
4 nent manufacturing, advanced battery
5 manufacturing, or battery recycling.

6 (B) AMOUNT LIMITATION.—The amount of
7 a grant awarded under the program shall be
8 not less than—

9 (i) \$50,000,000 for a project de-
10 scribed in subparagraph (A)(i);

11 (ii) \$100,000,000 for a project de-
12 scribed in subparagraph (A)(ii); and

13 (iii) \$50,000,000 for a project de-
14 scribed in subparagraph (A)(iii).

15 (C) PRIORITY; CONSIDERATION.—In
16 awarding grants to eligible entities under the
17 program, the Secretary shall—

18 (i) give priority to an eligible entity
19 that—

20 (I) is located and operates in the
21 United States; and

22 (II) deploys United States-owned
23 intellectual property and content; and

24 (ii) take into consideration whether a
25 project—

1 (I) provides workforce opportuni-
2 ties in low- and moderate-income com-
3 munities;

4 (II) provides workforce opportu-
5 nities in communities that have lost
6 jobs due to the displacement of fossil
7 energy jobs;

8 (III) encourages partnership with
9 universities and laboratories to spur
10 innovation and drive down costs; and

11 (IV) takes into account green-
12 house gas emissions reductions and
13 energy efficient manufacturing oppor-
14 tunities.

15 (4) APPROPRIATIONS.—In addition to amounts
16 otherwise made available, there is appropriated to
17 the Secretary to carry out the program, out of any
18 amounts in the Treasury not otherwise appropriated,
19 \$3,000,000,000 for the period of fiscal years 2022
20 through 2026, to remain available until expended.

21 (d) REPORTING REQUIREMENTS.—Not later than 1
22 year after the date of enactment of this Act, and annually
23 thereafter, the Secretary shall submit to Congress a report
24 on the grant programs established under subsections (b)

1 and (c), including, with respect to each grant program,
2 a description of—

3 (1) the number of grant applications received;

4 (2) the number of grants awarded and the
5 amount of each award; and

6 (3) the purpose and status of each project car-
7 ried out using a grant.

8 (e) LITHIUM-ION BATTERY RECYCLING PRIZE COM-
9 PETITION.—

10 (1) IN GENERAL.—The Secretary shall continue
11 to carry out the Lithium-Ion Battery Recycling
12 Prize Competition of the Department established
13 pursuant to section 24 of the Stevenson-Wydler
14 Technology Innovation Act of 1980 (15 U.S.C.
15 3719) (referred to in this subsection as the “com-
16 petition”).

17 (2) ADDITIONAL FUNDING FOR PILOT
18 PROJECTS.—

19 (A) APPROPRIATIONS.—In addition to
20 amounts otherwise made available, there is ap-
21 propriated to the Secretary to carry out Phase
22 III of the competition, out of any amounts in
23 the Treasury not otherwise appropriated,
24 \$10,000,000 for fiscal year 2022, to remain
25 available until expended.

1 (B) USE OF FUNDS.—The Secretary may
2 use amounts made available under subpara-
3 graph (A)—

4 (i) to increase the number of winners
5 of Phase III of the competition;

6 (ii) to increase the amount awarded to
7 each winner of Phase III of the competi-
8 tion; and

9 (iii) to carry out any other activity
10 that is consistent with the goals of Phase
11 III of the competition, as determined by
12 the Secretary.

13 (f) TASK FORCE ON BATTERY PRODUCER REQUIRE-
14 MENTS.—

15 (1) DEFINITIONS.—In this subsection:

16 (A) BATTERY.—The term “battery” means
17 a device that—

18 (i) consists of 1 or more electro-
19 chemical cells that are electrically con-
20 nected; and

21 (ii) is designed to store and deliver
22 electric energy.

23 (B) BATTERY PRODUCER.—The term
24 “battery producer” means, with respect to a
25 battery or battery-containing product that is

1 sold, offered for sale, or distributed for sale in
2 the United States, including through retail,
3 wholesale, business-to-business, and online sale,
4 the following applicable entity:

5 (i) A person who—

6 (I) manufactures the battery or
7 battery-containing product; and

8 (II) sells or offers for sale the
9 battery or battery-containing product
10 under the brand of that person.

11 (ii) If there is no person described in
12 clause (i) with respect to the battery or
13 battery-containing product, the owner or li-
14 censee of the brand under which the bat-
15 tery or battery-containing product is sold,
16 offered for sale, or distributed, regardless
17 of whether the trademark of the brand is
18 registered.

19 (iii) If there is no person described in
20 clause (i) or (ii) with respect to the battery
21 or battery-containing product, a person
22 that imports the battery or battery-con-
23 taining product into the United States for
24 sale or distribution.

1 (C) BATTERY-CONTAINING PRODUCT.—

2 The term “battery-containing product” means a
3 new or unused product that contains or is pack-
4 aged with a battery.

5 (2) TASK FORCE.—The Secretary shall convene
6 a task force to develop a battery producer responsi-
7 bility framework that—

8 (A) addresses battery recycling goals, cost
9 structures for mandatory recycling, reporting
10 requirements, product design, collection models,
11 and transportation of collected materials;

12 (B) provides sufficient flexibility to allow
13 battery producers to determine cost-effective
14 strategies for compliance with the framework;
15 and

16 (C) outlines regulatory pathways for effec-
17 tive recycling.

18 (3) TASK FORCE MEMBERS.—Members of the
19 task force convened under paragraph (2) shall in-
20 clude—

21 (A) battery producers, manufacturers, re-
22 tailers, recyclers, collectors, and refiners;

23 (B) States and municipalities; and

24 (C) other relevant stakeholders, as deter-
25 mined by the Secretary.

1 (4) REPORT.—Not later than 1 year after the
2 date on which the Secretary convenes the task force
3 under paragraph (2), the Secretary shall submit to
4 Congress a report that—

5 (A) describes the producer responsibility
6 framework developed by the task force;

7 (B) includes the recommendations of the
8 task force on how best to implement potential
9 enforcement mechanism to ensure that battery
10 producers and sellers are contributing to the re-
11 cycling of batteries; and

12 (C) suggests regulatory pathways for effec-
13 tive recycling.

14 **SEC. 2008. ELECTRIC DRIVE VEHICLE BATTERY RECYCLING**
15 **AND SECOND-LIFE APPLICATIONS PROGRAM.**

16 Section 641 of the Energy Independence and Security
17 Act of 2007 (42 U.S.C. 17231) is amended—

18 (1) by striking subsection (k) and inserting the
19 following:

20 “(k) **ELECTRIC DRIVE VEHICLE BATTERY SECOND-**
21 **LIFE APPLICATIONS AND RECYCLING.**—

22 “(1) **DEFINITIONS.**—In this subsection:

23 “(A) **BATTERY RECYCLING AND SECOND-**
24 **LIFE APPLICATIONS PROGRAM.**—The term ‘bat-
25 tery recycling and second-life applications pro-

1 gram’ means the electric drive vehicle battery
2 recycling and second-life applications program
3 established under paragraph (3).

4 “(B) CRITICAL MATERIAL.—The term
5 ‘critical material’ has the meaning given the
6 term in section 7002(a) of the Energy Act of
7 2020 (30 U.S.C. 1606(a)).

8 “(C) ECONOMICALLY DISTRESSED AREA.—
9 The term ‘economically distressed area’ means
10 an area described in section 301(a) of the Pub-
11 lic Works and Economic Development Act of
12 1965 (42 U.S.C. 3161(a)).

13 “(D) ELECTRIC DRIVE VEHICLE BAT-
14 TERY.—The term ‘electric *drive* vehicle battery’
15 means any battery that is a motive power
16 source for an electric drive vehicle.

17 “(E) ELIGIBLE ENTITY.—The term ‘eligi-
18 ble entity’ means an entity described in any of
19 paragraphs (1) through (5) of section 989(b) of
20 the Energy Policy Act of 2005 (42 U.S.C.
21 16353(b)).

22 “(2) PROGRAM.—The Secretary shall carry out
23 a program of research, development, and demonstra-
24 tion of—

1 “(A) second-life applications for energy
2 storage devices that have been used to power
3 electric drive vehicles; and

4 “(B) technologies and processes for final
5 recycling and disposal of the devices described
6 in subparagraph (A).

7 “(3) ELECTRIC DRIVE VEHICLE BATTERY RECY-
8 CLING AND SECOND-LIFE APPLICATIONS.—

9 “(A) IN GENERAL.—In carrying out the
10 program under paragraph (2), the Secretary
11 shall establish an electric drive vehicle battery
12 recycling and second-life applications program
13 under which the Secretary shall—

14 “(i) award grants under subparagraph
15 (D); and

16 “(ii) carry out other activities in ac-
17 cordance with this paragraph.

18 “(B) PURPOSES.—The purposes of the
19 battery recycling and second-life applications
20 program are the following:

21 “(i) To improve the recycling and sec-
22 ond-use rates of electric drive vehicle bat-
23 teries.

24 “(ii) To optimize the design and
25 adaptability of electric drive vehicle bat-

1 teries to make electric drive vehicle bat-
2 teries more easily recyclable.

3 “(iii) To establish alternative supply
4 chains for critical materials that are found
5 in electric drive vehicle batteries.

6 “(iv) To reduce the cost of manufac-
7 turing, installation, purchase, operation,
8 and maintenance of electric drive vehicle
9 batteries.

10 “(v) To improve the environmental
11 impact of electric drive vehicle battery re-
12 cycling processes.

13 “(C) TARGETS.—In carrying out the bat-
14 tery recycling and second-life applications pro-
15 gram, the Secretary shall address near-term (up
16 to 2 years), mid-term (up to 5 years), and long-
17 term (up to 10 years) challenges to the recy-
18 cling of electric drive vehicle batteries.

19 “(D) GRANTS.—

20 “(i) IN GENERAL.—In carrying out
21 the battery recycling and second-life appli-
22 cations program, the Secretary shall award
23 multiyear grants on a competitive, merit-
24 reviewed basis to eligible entities—

1 “(I) to conduct research, develop-
2 ment, testing, and evaluation of solu-
3 tions to increase the rate and produc-
4 tivity of electric drive vehicle battery
5 recycling; and

6 “(II) for research, development,
7 and demonstration projects to create
8 innovative and practical approaches to
9 increase the recycling and second-use
10 of electric drive vehicle batteries, in-
11 cluding by addressing—

12 “(aa) technology to increase
13 the efficiency of electric drive ve-
14 hicle battery recycling and maxi-
15 mize the recovery of critical ma-
16 terials for use in new products;

17 “(bb) expanded uses for crit-
18 ical materials recovered from
19 electric drive vehicle batteries;

20 “(cc) product design and
21 construction to facilitate the dis-
22 assembly and recycling of electric
23 drive vehicle batteries;

24 “(dd) product design and
25 construction and other tools and

1 techniques to extend the lifecycle
2 of electric drive vehicle batteries,
3 including methods to promote the
4 safe second-use of electric drive
5 vehicle batteries;

6 “(ee) strategies to increase
7 consumer acceptance of, and par-
8 ticipation in, the recycling of
9 electric drive vehicle batteries;

10 “(ff) improvements and
11 changes to electric drive vehicle
12 battery chemistries that include
13 ways to decrease processing costs
14 for battery recycling without sac-
15 rificing front-end performance;

16 “(gg) second-use of electric
17 drive vehicle batteries, including
18 in applications outside of the
19 automotive industry; and

20 “(hh) the commercialization
21 and scale-up of electric drive ve-
22 hicle battery recycling tech-
23 nologies.

1 “(ii) PRIORITY.—In awarding grants
2 under clause (i), the Secretary shall give
3 priority to projects that—

4 “(I) are located in geographically
5 diverse regions of the United States;

6 “(II) include business commer-
7 cialization plans that have the poten-
8 tial for the recycling of electric drive
9 vehicle batteries at high volumes;

10 “(III) support the development of
11 advanced manufacturing technologies
12 that have the potential to improve the
13 competitiveness of the United States
14 in the international electric drive vehi-
15 cle battery manufacturing sector;

16 “(IV) provide the greatest poten-
17 tial to reduce costs for consumers and
18 promote accessibility and community
19 implementation of demonstrated tech-
20 nologies;

21 “(V) increase disclosure and
22 transparency of information to con-
23 sumers;

1 “(VI) support the development or
2 demonstration of projects in economi-
3 cally distressed areas; and

4 “(VII) support other relevant pri-
5 orities, as determined to be appro-
6 priate by the Secretary.

7 “(iii) SOLICITATION.—Not later than
8 90 days after the date of enactment of the
9 Energy Infrastructure Act, and annually
10 thereafter, the Secretary shall conduct a
11 national solicitation for applications for
12 grants described in clause (i).

13 “(iv) DISSEMINATION OF RESULTS.—
14 The Secretary shall publish the results of
15 the projects carried out through grants
16 awarded under clause (i) through—

17 “(I) best practices relating to
18 those grants, for use in the electric
19 drive vehicle battery manufacturing,
20 design, installation, refurbishing, or
21 recycling industries;

22 “(II) coordination with informa-
23 tion dissemination programs relating
24 to general recycling of electronic de-
25 vices; and

1 “(III) educational materials for
2 the public, produced in conjunction
3 with State and local governments or
4 nonprofit organizations, on the prob-
5 lems and solutions relating to the re-
6 cycling and second-life applications of
7 electric drive vehicle batteries.

8 “(E) COORDINATION WITH OTHER PRO-
9 GRAMS OF THE DEPARTMENT.—In carrying out
10 the battery recycling and second-life applica-
11 tions program, the Secretary shall coordinate
12 and leverage the resources of complementary ef-
13 forts of the Department.

14 “(F) STUDY AND REPORT.—

15 “(i) STUDY.—The Secretary shall con-
16 duct a study on the viable market opportu-
17 nities available for the recycling, second-
18 use, and manufacturing of electric drive
19 vehicle batteries in the United States.

20 “(ii) REPORT.—Not later than Janu-
21 ary 1, 2022, the Secretary shall submit to
22 the Committee on Energy and Natural Re-
23 sources of the Senate, the Committee on
24 Science, Space, and Technology of the
25 House of Representatives, and any other

1 relevant committee of Congress a report
2 containing the results of the study under
3 clause (i), including a description of—

4 “(I) the ability of relevant busi-
5 nesses or other entities to competi-
6 tively manufacture electric drive vehi-
7 cle batteries and recycle electric drive
8 vehicle batteries in the United States;

9 “(II) any existing electric drive
10 vehicle battery recycling and second-
11 use practices and plans of electric
12 drive vehicle manufacturing companies
13 in the United States;

14 “(III) any barriers to electric
15 drive vehicle battery recycling in the
16 United States;

17 “(IV) opportunities and barriers
18 in electric drive vehicle battery supply
19 chains in the United States and inter-
20 nationally, including with allies and
21 trading partners;

22 “(V) opportunities for job cre-
23 ation in the electric drive vehicle bat-
24 tery recycling and manufacturing
25 fields and the necessary skills employ-

1 ees must acquire for growth of those
2 fields in the United States;

3 “(VI) policy recommendations for
4 enhancing electric drive vehicle bat-
5 tery manufacturing and recycling in
6 the United States;

7 “(VII) any recommendations for
8 lowering logistics costs and creating
9 better coordination and efficiency with
10 respect to the removal, collection,
11 transportation, storage, and dis-
12 assembly of electric drive vehicle bat-
13 teries;

14 “(VIII) any recommendations for
15 areas of coordination with other Fed-
16 eral agencies to improve electric drive
17 vehicle battery recycling rates in the
18 United States;

19 “(IX) an aggressive 2-year target
20 and plan, the implementation of which
21 shall begin during the 90-day period
22 beginning on the date on which the
23 report is submitted, to enhance the
24 competitiveness of electric drive vehi-

1 cle battery manufacturing and recy-
2 cling in the United States; and

3 “(X) needs for future research,
4 development, and demonstration
5 projects in electric drive vehicle bat-
6 tery manufacturing, recycling, and re-
7 lated areas, as determined by the Sec-
8 retary.

9 “(G) EVALUATION.—Not later than 3
10 years after the date on which the report under
11 subparagraph (F)(ii) is submitted, and every 4
12 years thereafter, the Secretary shall conduct,
13 and make available to the public and the rel-
14 evant committees of Congress, an independent
15 review of the progress of the grants awarded
16 under subparagraph (D) in meeting the rec-
17 ommendations and targets included in the re-
18 port.”; and

19 (2) in subsection (p)—

20 (A) in paragraph (2), by striking “and;”;

21 (B) in paragraph (4), by adding “and” at
22 the end;

23 (C) in paragraph (5), by striking “; and”
24 and inserting a period;

25 (D) by striking paragraph (6);

1 (E) by redesignating paragraphs (1)
2 through (5) as subparagraphs (A) through (E),
3 respectively, and indenting appropriately;

4 (F) by striking the subsection designation
5 and heading and all that follows through
6 “There are” in the matter preceding subpara-
7 graph (A) (as so redesignated) and inserting
8 the following:

9 “(p) FUNDING.—

10 “(1) AUTHORIZATION OF APPROPRIATIONS.—

11 There are”; and

12 (G) by adding at the end the following:

13 “(2) APPROPRIATIONS.—In addition to
14 amounts otherwise made available, there is appro-
15 priated to the Secretary to carry out the electric
16 drive vehicle battery second-life applications and re-
17 cycling program under subsection (k), out of any
18 amounts in the Treasury not otherwise appropriated,
19 \$40,000,000 for each of fiscal years 2022 through
20 2026.”.

21 **SEC. 2009. ADVANCED ENERGY MANUFACTURING AND RE-**

22 **CYCLING GRANT PROGRAM.**

23 (a) DEFINITIONS.—In this section:

24 (1) ADVANCED ENERGY PROPERTY.—The term

25 “advanced energy property” means—

1 (A) property designed to be used to
2 produce energy from the sun, water, wind, geo-
3 thermal or hydrothermal (as those terms are
4 defined in section 612 of the Energy Independ-
5 ence and Security Act of 2007 (42 U.S.C.
6 17191)) resources, enhanced geothermal sys-
7 tems (as defined in that section), or other re-
8 newable resources;

9 (B) fuel cells, microturbines, or energy
10 storage systems and components;

11 (C) electric grid modernization equipment
12 or components;

13 (D) property designed to capture, remove,
14 use, or sequester carbon oxide emissions;

15 (E) equipment designed to refine,
16 electrolyze, or blend any fuel, chemical, or prod-
17 uct that is—

18 (i) renewable; or

19 (ii) low-carbon and low-emission;

20 (F) property designed to produce energy
21 conservation technologies (including for residen-
22 tial, commercial, and industrial applications);

23 (G)(i) light-, medium-, or heavy-duty elec-
24 tric or fuel cell vehicles;

1 (ii) technologies, components, and mate-
2 rials of those vehicles; and

3 (iii) charging or refueling infrastructure
4 associated with those vehicles;

5 (H)(i) hybrid vehicles with a gross vehicle
6 weight rating of not less than 14,000 pounds;
7 and

8 (ii) technologies, components, and mate-
9 rials for those vehicles; and

10 (I) other advanced energy property de-
11 signed to reduce greenhouse gas emissions, as
12 may be determined by the Secretary.

13 (2) COVERED CENSUS TRACT.—The term “cov-
14 ered census tract” means a census tract—

15 (A) in which, after December 31, 1999, a
16 coal mine had closed;

17 (B) in which, after December 31, 2009, a
18 coal-fired electricity generating unit had been
19 retired; or

20 (C) that is immediately adjacent to a cen-
21 sus tract described in subparagraph (A) or (B).

22 (3) ELIGIBLE ENTITY.—The term “eligible enti-
23 ty” means a manufacturing firm—

24 (A) the gross annual sales of which are
25 less than \$100,000,000;

1 (B) that has fewer than 500 employees at
2 the plant site of the manufacturing firm; and

3 (C) the annual energy bills of which total
4 more than \$100,000 but less than \$2,500,000.

5 (4) MINORITY-OWNED.—The term “minority-
6 owned”, with respect to an eligible entity, means an
7 eligible entity not less than 51 percent of which is
8 owned by 1 or more Black American, Native Amer-
9 ican, Hispanic American, or Asian American individ-
10 uals.

11 (5) PROGRAM.—The term “Program” means
12 the grant program established under subsection (b).

13 (6) QUALIFYING ADVANCED ENERGY
14 PROJECT.—The term “qualifying advanced energy
15 project” means a project that—

16 (A)(i) re-equips, expands, or establishes a
17 manufacturing or recycling facility for the pro-
18 duction or recycling, as applicable, of advanced
19 energy property; or

20 (ii) re-equips an industrial or manufac-
21 turing facility with equipment designed to re-
22 duce the greenhouse gas emissions of that facil-
23 ity substantially below the greenhouse gas emis-
24 sions under current best practices, as deter-

1 mined by the Secretary, through the installation
2 of—

3 (I) low- or zero-carbon process heat
4 systems;

5 (II) carbon capture, transport, utiliza-
6 tion, and storage systems;

7 (III) technology relating to energy ef-
8 ficiency and reduction in waste from indus-
9 trial processes; or

10 (IV) any other industrial technology
11 that significantly reduces greenhouse gas
12 emissions, as determined by the Secretary;

13 (B) has a reasonable expectation of com-
14 mercial viability, as determined by the Sec-
15 retary; and

16 (C) is located in a covered census tract.

17 (b) ESTABLISHMENT.—Not later than 180 days after
18 the date of enactment of this Act, the Secretary shall es-
19 tablish a program to award grants to eligible entities to
20 carry out qualifying advanced energy projects.

21 (c) APPLICATIONS.—

22 (1) IN GENERAL.—Each eligible entity seeking
23 a grant under the Program shall submit to the Sec-
24 retary an application at such time, in such manner,
25 and containing such information as the Secretary

1 may require, including a description of the proposed
2 qualifying advanced energy project to be carried out
3 using the grant.

4 (2) SELECTION CRITERIA.—

5 (A) PROJECTS.—In selecting eligible enti-
6 ties to receive grants under the Program, the
7 Secretary shall, with respect to the qualifying
8 advanced energy projects proposed by the eligi-
9 ble entities, give higher priority to projects
10 that—

11 (i) will provide higher net impact in
12 avoiding or reducing anthropogenic emis-
13 sions of greenhouse gases;

14 (ii) will result in a higher level of do-
15 mestic job creation (both direct and indi-
16 rect) during the lifetime of the project;

17 (iii) will result in a higher level of job
18 creation in the vicinity of the project, par-
19 ticularly with respect to—

20 (I) low-income communities (as
21 described in section 45D(e) of the In-
22 ternal Revenue Code of 1986); and

23 (II) dislocated workers who were
24 previously employed in manufacturing,
25 coal power plants, or coal mining;

1 (iv) have higher potential for techno-
2 logical innovation and commercial deploy-
3 ment;

4 (v) have a lower levelized cost of—
5 (I) generated or stored energy; or
6 (II) measured reduction in en-
7 ergy consumption or greenhouse gas
8 emission (based on costs of the full
9 supply chain); and

10 (vi) have a shorter project time.

11 (B) ELIGIBLE ENTITIES.—In selecting eli-
12 gible entities to receive grants under the Pro-
13 gram, the Secretary shall give priority to eligi-
14 ble entities that are minority-owned.

15 (d) PROJECT COMPLETION AND LOCATION; RETURN
16 OF UNOBLIGATED FUNDS.—

17 (1) COMPLETION; RETURN OF UNOBLIGATED
18 FUNDS.—An eligible entity that receives a grant
19 under the Program shall be required—

20 (A) to complete the qualifying advanced
21 energy project funded by the grant not later
22 than 3 years after the date of receipt of the
23 grant funds; and

1 (B) to return to the Secretary any grant
2 funds that remain unobligated at the end of
3 that 3-year period.

4 (2) LOCATION.—If the Secretary determines
5 that an eligible entity awarded a grant under the
6 Program has carried out the applicable qualifying
7 advanced energy project at a location that is materi-
8 ally different from the location specified in the appli-
9 cation for the grant, the eligible entity shall be re-
10 quired to return the grant funds to the Secretary.

11 (e) TECHNICAL ASSISTANCE.—

12 (1) IN GENERAL.—Not later than 180 days
13 after the date of enactment of this Act, the Sec-
14 retary shall provide technical assistance on a selec-
15 tive basis to eligible entities that are seeking a grant
16 under the Program to enhance the impact of the
17 qualifying advanced energy project to be carried out
18 using the grant with respect to the selection criteria
19 described in subsection (c)(2)(A).

20 (2) APPLICATIONS.—An eligible entity desiring
21 technical assistance under paragraph (1) shall sub-
22 mit to the Secretary an application at such time, in
23 such manner, and containing such information as
24 the Secretary may require.

1 (3) FACTORS FOR CONSIDERATION.—In select-
2 ing eligible entities for technical assistance under
3 paragraph (1), the Secretary shall give higher pri-
4 ority to eligible entities that propose a qualifying ad-
5 vanced energy project that has greater potential for
6 enhancement of the impact of the project with re-
7 spect to the selection criteria described in subsection
8 (c)(2)(A).

9 (f) PUBLICATION OF GRANTS.—The Secretary shall
10 make publicly available the identity of each eligible entity
11 awarded a grant under the Program and the amount of
12 the grant.

13 (g) REPORT.—Not later than 4 years after the date
14 of enactment this Act, the Secretary shall—

15 (1) review the grants awarded under the Pro-
16 gram; and

17 (2) submit to the Committee on Energy and
18 Natural Resources of the Senate and the Committee
19 on Energy and Commerce of the House of Rep-
20 resentatives a report describing those grants.

21 (h) APPROPRIATIONS.—In addition to amounts other-
22 wise made available, there is appropriated to the Secretary
23 to carry out the Program, out of any amounts in the
24 Treasury not otherwise appropriated, \$150,000,000 for
25 each of fiscal years 2022 through 2026.

1 **TITLE III—FUELS AND TECH-**
2 **NOLOGY INFRASTRUCTURE**
3 **INVESTMENTS**

4 **Subtitle A—Carbon Capture, Utili-**
5 **zation, Storage, and Transpor-**
6 **tation Infrastructure**

7 **SEC. 3001. FINDINGS.**

8 Congress finds that—

9 (1) the industrial sector is integral to the econ-
10 omy of the United States—

11 (A) providing millions of jobs and essential
12 products; and

13 (B) demonstrating global leadership in
14 manufacturing and innovation;

15 (2) carbon capture and storage technologies are
16 necessary for reducing hard-to-abate emissions from
17 the industrial sector, which emits nearly 25 percent
18 of carbon dioxide emissions in the United States;

19 (3) carbon removal and storage technologies, in-
20 cluding direct air capture, must be deployed at
21 large-scale in the coming decades to remove carbon
22 dioxide directly from the atmosphere;

23 (4) large-scale deployment of carbon capture,
24 removal, utilization, transport, and storage—

1 (A) is critical for achieving mid-century cli-
2 mate goals; and

3 (B) will drive regional economic develop-
4 ment, technological innovation, and high-wage
5 employment;

6 (5) carbon capture, removal, and utilization
7 technologies require a backbone system of shared
8 carbon dioxide transport and storage infrastructure
9 to enable large-scale deployment, realize economies
10 of scale, and create an interconnected carbon man-
11 agement market;

12 (6) carbon dioxide transport infrastructure and
13 permanent geological storage are proven and safe
14 technologies with existing Federal and State regu-
15 latory frameworks;

16 (7) carbon dioxide transport and storage infra-
17 structure share similar barriers to deployment pre-
18 viously faced by other types of critical national infra-
19 structure, such as high capital costs and chicken-
20 and-egg challenges, that require Federal and State
21 support, in combination with private investment, to
22 be overcome; and

23 (8) each State should take into consideration,
24 with respect to new carbon dioxide transportation in-
25 frastructure—

1 (A) qualifying the infrastructure as pollu-
2 tion control devices under applicable laws (in-
3 cluding regulations) of the State; and

4 (B) establishing a waiver of ad valorem
5 and property taxes for the infrastructure for a
6 period of not less than 10 years.

7 **SEC. 3002. CARBON UTILIZATION PROGRAM.**

8 Section 969A of the Energy Policy Act of 2005 (42
9 U.S.C. 16298a) is amended—

10 (1) in subsection (a)—

11 (A) by redesignating paragraphs (3) and
12 (4) as paragraphs (4) and (5), respectively; and

13 (B) by inserting after paragraph (2) the
14 following:

15 “(3) to develop or obtain, in coordination with
16 other applicable Federal agencies and standard-set-
17 ting organizations, standards and certifications, as
18 appropriate, to facilitate the commercialization of
19 the products and technologies described in para-
20 graph (2);”;

21 (2) in subsection (b)—

22 (A) by redesignating paragraph (2) as
23 paragraph (3);

24 (B) by inserting after paragraph (1) the
25 following:

1 “(2) GRANT PROGRAM.—

2 “(A) IN GENERAL.—Not later than 1 year
3 after the date of enactment of the Energy In-
4 frastructure Act, the Secretary shall establish a
5 program to provide grants to eligible entities to
6 use in accordance with subparagraph (D).

7 “(B) ELIGIBLE ENTITIES.—To be eligible
8 to receive a grant under this paragraph, an en-
9 tity shall be—

10 “(i) a State;

11 “(ii) a unit of local government; or

12 “(iii) a public utility or agency.

13 “(C) APPLICATIONS.—Eligible entities de-
14 siring a grant under this paragraph shall sub-
15 mit to the Secretary an application at such
16 time, in such manner, and containing such in-
17 formation as the Secretary determines to be ap-
18 propriate.

19 “(D) USE OF FUNDS.—An eligible entity
20 shall use a grant received under this paragraph
21 to procure and use commercial or industrial
22 products that—

23 “(i) use or are derived from anthropo-
24 genic carbon oxides; and

1 “(ii) demonstrate significant net re-
2 ductions in lifecycle greenhouse gas emis-
3 sions compared to incumbent technologies,
4 processes, and products.”; and

5 (C) in paragraph (3) (as so redesignated),
6 by striking “paragraph (1)” and inserting “this
7 subsection”;

8 (3) in subsection (c)(4), by striking “, subject
9 to the availability of appropriations”; and

10 (4) by striking subsection (d) and inserting the
11 following:

12 “(d) APPROPRIATIONS.—In addition to amounts oth-
13 erwise made available, there are appropriated to the Sec-
14 retary to carry out this section, out of any amounts in
15 the Treasury not otherwise appropriated—

16 “(1) \$41,000,000 for fiscal year 2022;

17 “(2) \$65,250,000 for fiscal year 2023;

18 “(3) \$66,562,500 for fiscal year 2024;

19 “(4) \$67,940,625 for fiscal year 2025; and

20 “(5) \$69,387,656 for fiscal year 2026.”.

21 **SEC. 3003. CARBON CAPTURE TECHNOLOGY PROGRAM.**

22 Section 962(b)(2) of the Energy Policy Act of 2005
23 (42 U.S.C. 16292(b)(2)) is amended—

24 (1) in subparagraph (C), by striking “and” at
25 the end;

1 (2) in subparagraph (D), by striking “pro-
2 gram.” and inserting “program for carbon capture
3 technologies; and”; and

4 (3) by adding at the end the following:

5 “(E) a front-end engineering and design
6 program for carbon dioxide transport infra-
7 structure necessary to enable deployment of
8 carbon capture, utilization, and storage tech-
9 nologies.”.

10 **SEC. 3004. CARBON DIOXIDE TRANSPORTATION INFRA-**
11 **STRUCTURE FINANCE AND INNOVATION.**

12 (a) IN GENERAL.—Title IX of the Energy Policy Act
13 of 2005 (42 U.S.C. 16181 et seq.) is amended by adding
14 at the end the following:

15 **“Subtitle J—Carbon Dioxide Trans-**
16 **portation Infrastructure Fi-**
17 **nance and Innovation**

18 **“SEC. 999A. DEFINITIONS.**

19 “In this subtitle:

20 “(1) CIFIA PROGRAM.—The term ‘CIFIA pro-
21 gram’ means the carbon dioxide transportation in-
22 frastructure finance and innovation program estab-
23 lished under section 999B(a).

1 “(2) COMMON CARRIER.—The term ‘common
2 carrier’ means a transportation infrastructure oper-
3 ator or owner that—

4 “(A) publishes a publicly available tariff
5 containing the just and reasonable rates, terms,
6 and conditions of nondiscriminatory service;
7 and

8 “(B) holds itself out to provide transpor-
9 tation services to the public for a fee.

10 “(3) CONTINGENT COMMITMENT.—The term
11 ‘contingent commitment’ means a commitment to
12 obligate funds from future available budget author-
13 ity that is—

14 “(A) contingent on those funds being made
15 available in law at a future date; and

16 “(B) not an obligation of the Federal Gov-
17 ernment.

18 “(4) ELIGIBLE PROJECT COSTS.—The term ‘eli-
19 gible project costs’ means amounts substantially all
20 of which are paid by, or for the account of, an obli-
21 gor in connection with a project, including—

22 “(A) the cost of—

23 “(i) development-phase activities, in-
24 cluding planning, feasibility analysis, rev-
25 enue forecasting, environmental review,

1 permitting, preliminary engineering and
2 design work, and other preconstruction ac-
3 tivities;

4 “**(ii)** construction, reconstruction, re-
5 habilitation, replacement, and acquisition
6 of real property (including land relating to
7 the project and improvements to land), en-
8 vironmental mitigation, construction con-
9 tingencies, and acquisition and installation
10 of equipment (including labor); and

11 “**(iii)** capitalized interest necessary to
12 meet market requirements, reasonably re-
13 quired reserve funds, capital issuance ex-
14 penses, and other carrying costs during
15 construction; and

16 “**(B)** transaction costs associated with fi-
17 nancing the project, including—

18 “(i) the cost of legal counsel and tech-
19 nical consultants; and

20 “(ii) any subsidy amount paid in ac-
21 cordance with section 999B(c)(3)(B)(ii) or
22 section 999C(b)(6)(B)(ii).

23 “(5) **FEDERAL CREDIT INSTRUMENT.**—The
24 term ‘Federal credit instrument’ means a secured

1 loan or loan guarantee authorized to be provided
2 under the CIFIA program with respect to a project.

3 “(6) LENDER.—The term ‘lender’ means a
4 qualified institutional buyer (as defined in section
5 230.144A(a) of title 17, Code of Federal Regula-
6 tions (or a successor regulation), commonly known
7 as Rule 144A(a) of the Securities and Exchange
8 Commission and issued under the Securities Act of
9 1933 (15 U.S.C. 77a et seq.)), that is not a Federal
10 qualified institutional buyer.

11 “(7) LETTER OF INTEREST.—The term ‘letter
12 of interest’ means a letter submitted by a potential
13 applicant prior to an application for credit assistance
14 in a format prescribed by the Secretary on the
15 website of the CIFIA program that—

16 “(A) describes the project and the location,
17 purpose, and cost of the project;

18 “(B) outlines the proposed financial plan,
19 including the requested credit and grant assist-
20 ance and the proposed obligor;

21 “(C) provides a status of environmental re-
22 view; and

23 “(D) provides information regarding satis-
24 faction of other eligibility requirements of the
25 CIFIA program.

1 “(8) LOAN GUARANTEE.—The term ‘loan guar-
2 antee’ means any guarantee or other pledge by the
3 Secretary to pay all or part of the principal of, and
4 interest on, a loan made to an obligor, or debt obli-
5 gation issued by an obligor, in each case funded by
6 a lender.

7 “(9) MASTER CREDIT AGREEMENT.—The term
8 ‘master credit agreement’ means a conditional agree-
9 ment that—

10 “(A) is for the purpose of extending credit
11 assistance for—

12 “(i) a project of high priority under
13 section 999B(c)(3)(A); or

14 “(ii) a project covered under section
15 999B(c)(3)(B);

16 “(B) does not provide for a current obliga-
17 tion of Federal funds; and

18 “(C) would—

19 “(i) make a contingent commitment of
20 a Federal credit instrument or grant at a
21 future date, subject to—

22 “(I) the availability of future
23 funds being made available to carry
24 out the CIFIA program; and

1 entry into the agreement or release of the
2 commitment, as applicable, unless other-
3 wise extended by the Secretary.

4 “(10) OBLIGOR.—The term ‘obligor’ means a
5 corporation, partnership, joint venture, trust, non-
6 Federal governmental entity, agency, or instrumen-
7 tality, or other entity that is liable for payment of
8 the principal of, or interest on, a Federal credit in-
9 strument.

10 “(11) PRODUCED IN THE UNITED STATES.—
11 The term ‘produced in the United States’, with re-
12 spect to iron and steel, means that all manufac-
13 turing processes for the iron and steel, including the
14 application of any coating, occurs within the United
15 States.

16 “(12) PROJECT.—The term ‘project’ means a
17 project for common carrier carbon dioxide transpor-
18 tation infrastructure or associated equipment, in-
19 cluding pipeline, shipping, rail, or other transpor-
20 tation infrastructure and associated equipment, that
21 will transport or handle carbon dioxide captured
22 from anthropogenic sources or ambient air, as the
23 Secretary determines to be appropriate.

24 “(13) PROJECT OBLIGATION.—The term
25 ‘project obligation’ means any note, bond, debenture,

1 or other debt obligation issued by an obligor in con-
2 nection with the financing of a project, other than
3 a Federal credit instrument.

4 “(14) SECURED LOAN.—The term ‘secured
5 loan’ means a direct loan to an obligor or a debt ob-
6 ligation issued by an obligor and purchased by the
7 Secretary, in each case funded by the Secretary in
8 connection with the financing of a project under sec-
9 tion 999C.

10 “(15) SUBSIDY AMOUNT.—The term ‘subsidy
11 amount’ means the amount of budget authority suf-
12 ficient to cover the estimated long-term cost to the
13 Federal Government of a Federal credit instru-
14 ment—

15 “(A) calculated on a net present value
16 basis; and

17 “(B) excluding administrative costs and
18 any incidental effects on governmental receipts
19 or outlays in accordance with the Federal Cred-
20 it Reform Act of 1990 (2 U.S.C. 661 et seq.).

21 “(16) SUBSTANTIAL COMPLETION.—The term
22 ‘substantial completion’, with respect to a project,
23 means the date—

24 “(A) on which the project commences
25 transportation of carbon dioxide; or

1 “(B) of a comparable event to the event
2 described in subparagraph (A), as determined
3 by the Secretary and specified in the project
4 credit agreement.

5 **“SEC. 999B. DETERMINATION OF ELIGIBILITY AND**
6 **PROJECT SELECTION.**

7 “(a) ESTABLISHMENT OF PROGRAM.—The Secretary
8 shall establish and carry out a carbon dioxide transpor-
9 tation infrastructure finance and innovation program,
10 under which the Secretary shall provide for eligible
11 projects in accordance with this subtitle—

12 “(1) a Federal credit instrument under section
13 999C;

14 “(2) a grant under section 999D; or

15 “(3) both a Federal credit instrument and a
16 grant.

17 “(b) ELIGIBILITY.—

18 “(1) IN GENERAL.—A project shall be eligible
19 to receive a Federal credit instrument or a grant
20 under the CIFLA program if—

21 “(A) the entity proposing to carry out the
22 project submits a letter of interest prior to sub-
23 mission of an application under paragraph (3)
24 for the project; and

1 the Secretary, and cash sweeps or other
2 structural enhancements;

3 “(iii) the projected financial strength
4 of the obligor—

5 “(I) at the time of loan close;
6 and

7 “(II) throughout the loan term,
8 including after the project is com-
9 pleted;

10 “(iv) the financial strength of the in-
11 vestors and strategic partners of the obli-
12 gor, if applicable; and

13 “(v) other financial metrics and anal-
14 yses that are relied on by the private lend-
15 ing community and nationally recognized
16 credit rating agencies, as determined ap-
17 propriate by the Secretary.

18 “(3) APPLICATIONS.—To be eligible for assist-
19 ance under the CIFIA program, an obligor shall
20 submit to the Secretary a project application at such
21 time, in such manner, and containing such informa-
22 tion as the Secretary determines to be appropriate.

23 “(4) ELIGIBLE PROJECT COSTS.—A project
24 under the CIFIA program shall have eligible project

1 costs that are reasonably anticipated to equal or ex-
2 ceed \$100,000,000.

3 “(5) REVENUE SOURCES.—The applicable Fed-
4 eral credit instrument shall be repayable, in whole or
5 in part, from—

6 “(A) user fees;

7 “(B) payments owing to the obligor under
8 a public-private partnership; or

9 “(C) other revenue sources that also secure
10 or fund the project obligations.

11 “(6) OBLIGOR WILL BE IDENTIFIED LATER.—
12 A State, local government, agency, or instrumen-
13 tality of a State or local government, or a public au-
14 thority, may submit to the Secretary an application
15 under paragraph (3), under which a private party to
16 a public-private partnership will be—

17 “(A) the obligor; and

18 “(B) identified at a later date through
19 completion of a procurement and selection of
20 the private party.

21 “(7) BENEFICIAL EFFECTS.—The Secretary
22 shall determine that financial assistance for each
23 project under the CIFIA program will—

24 “(A) attract public or private investment
25 for the project; or

1 “(B) enable the project to proceed at an
2 earlier date than the project would otherwise be
3 able to proceed or reduce the lifecycle costs (in-
4 cluding debt service costs) of the project.

5 “(8) PROJECT READINESS.—To be eligible for
6 assistance under the CIFIA program, the applicant
7 shall demonstrate a reasonable expectation that the
8 contracting process for construction of the project
9 can commence by not later than 90 days after the
10 date on which a Federal credit instrument or grant
11 is obligated for the project under the CIFIA pro-
12 gram.

13 “(c) SELECTION AMONG ELIGIBLE PROJECTS.—

14 “(1) ESTABLISHMENT OF APPLICATION PROC-
15 ESS.—The Secretary shall establish an application
16 process under which projects that are eligible to re-
17 ceive assistance under subsection (b) may—

18 “(A) receive credit assistance on terms ac-
19 ceptable to the Secretary, if adequate funds are
20 available (including any funds provided on be-
21 half of an eligible project under paragraph
22 (3)(B)(ii)) to cover the subsidy amount associ-
23 ated with the Federal credit instrument; and

24 “(B) receive grants under section 999D
25 if—

1 “(i) adequate funds are available to
2 cover the amount of the grant; and

3 “(ii) the Secretary determines that
4 the project is eligible under subsection (b).

5 “(2) PRIORITY.—In selecting projects to receive
6 credit assistance under subsection (b), the Secretary
7 shall give priority to projects that—

8 “(A) are large-capacity, common carrier
9 infrastructure;

10 “(B) have demonstrated demand for use of
11 the infrastructure by associated projects that
12 capture carbon dioxide from anthropogenic
13 sources or ambient air;

14 “(C) enable geographical diversity in asso-
15 ciated projects that capture carbon dioxide from
16 anthropogenic sources or ambient air, with the
17 goal of enabling projects in all major carbon di-
18 oxide-emitting regions of the United States; and

19 “(D) are sited within, or adjacent to, exist-
20 ing pipeline or other linear infrastructure cor-
21 ridors, in a manner that minimizes environ-
22 mental disturbance and other siting concerns.

23 “(3) MASTER CREDIT AGREEMENTS.—

1 “(A) PRIORITY PROJECTS.—The Secretary
2 may enter into a master credit agreement for a
3 project that the Secretary determines—

4 “(i) will likely be eligible for credit as-
5 sistance under subsection (b), on obtain-
6 ing—

7 “(I) additional commitments
8 from associated carbon capture
9 projects to use the project; or

10 “(II) all necessary permits and
11 approvals; and

12 “(ii) is a project of high priority, as
13 determined in accordance with the criteria
14 described in paragraph (2).

15 “(B) ADEQUATE FUNDING NOT AVAIL-
16 ABLE.—If the Secretary fully obligates funding
17 to eligible projects for a fiscal year and ade-
18 quate funding is not available to fund a Federal
19 credit instrument, a project sponsor (including
20 a unit of State or local government) of an eligi-
21 ble project may elect—

22 “(i)(I) to enter into a master credit
23 agreement in lieu of the Federal credit in-
24 strument; and

1 “(II) to wait to execute a Federal
2 credit instrument until the fiscal year for
3 which additional funds are available to re-
4 ceive credit assistance; or

5 “(ii) if the lack of adequate funding is
6 solely with respect to amounts available for
7 the subsidy amount, to pay the subsidy
8 amount to fund the Federal credit instru-
9 ment.

10 “(d) FEDERAL REQUIREMENTS.—

11 “(1) IN GENERAL.—Nothing in this subtitle su-
12 persedes the applicability of any other requirement
13 under Federal law (including regulations).

14 “(2) NEPA.—Federal credit assistance may
15 only be provided under this subtitle for a project
16 that has received an environmental categorical exclu-
17 sion, a finding of no significant impact, or a record
18 of decision under the National Environmental Policy
19 Act of 1969 (42 U.S.C. 4321 et seq.).

20 “(e) USE OF AMERICAN IRON, STEEL, AND MANU-
21 FACTURED GOODS.—

22 “(1) IN GENERAL.—Except as provided in para-
23 graph (2), no Federal credit instrument or grant
24 provided under the CIFIA program shall be made
25 available for a project unless all iron, steel, and

1 manufactured goods used in the project are pro-
2 duced in the United States.

3 “(2) EXCEPTIONS.—Paragraph (1) shall not
4 apply in any case or category of cases with respect
5 to which the Secretary determines that—

6 “(A) the application would be inconsistent
7 with the public interest;

8 “(B) iron, steel, or a relevant manufac-
9 tured good is not produced in the United States
10 in sufficient and reasonably available quantity,
11 or of a satisfactory quality; or

12 “(C) the inclusion of iron, steel, or a man-
13 ufactured good produced in the United States
14 will increase the cost of the overall project by
15 more than 25 percent.

16 “(3) WAIVERS.—If the Secretary receives a re-
17 quest for a waiver under this subsection, the Sec-
18 retary shall—

19 “(A) make available to the public a copy of
20 the request, together with any information
21 available to the Secretary concerning the re-
22 quest—

23 “(i) on an informal basis; and

1 “(ii) by electronic means, including on
2 the official public website of the Depart-
3 ment;

4 “(B) allow for informal public comment re-
5 lating to the request for not fewer than 15 days
6 before making a determination with respect to
7 the request; and

8 “(C) approve or disapprove the request by
9 not later than the date that is 120 days after
10 the date of receipt of the request.

11 “(4) APPLICABILITY.—This subsection shall be
12 applied in accordance with any applicable obligations
13 of the United States under international agreements.

14 “(f) APPLICATION PROCESSING PROCEDURES.—

15 “(1) NOTICE OF COMPLETE APPLICATION.—
16 Not later than 30 days after the date of receipt of
17 an application under this section, the Secretary shall
18 provide to the applicant a written notice describing
19 whether—

20 “(A) the application is complete; or

21 “(B) additional information or materials
22 are needed to complete the application.

23 “(2) APPROVAL OR DENIAL OF APPLICATION.—

24 Not later than 60 days after the date of issuance of
25 a written notice under paragraph (1), the Secretary

1 shall provide to the applicant a written notice in-
2 forming the applicant whether the Secretary has ap-
3 proved or disapproved the application.

4 “(g) DEVELOPMENT-PHASE ACTIVITIES.—Any Fed-
5 eral credit instrument provided under the CIFLA program
6 may be used to finance up to 100 percent of the cost of
7 development-phase activities, as described in section
8 999A(4)(A).

9 **“SEC. 999C. SECURED LOANS.**

10 “(a) AGREEMENTS.—

11 “(1) IN GENERAL.—Subject to paragraph (2),
12 the Secretary may enter into agreements with 1 or
13 more obligors to make secured loans, the proceeds of
14 which—

15 “(A) shall be used—

16 “(i) to finance eligible project costs of
17 any project selected under section 999B;

18 “(ii) to refinance interim construction
19 financing of eligible project costs of any
20 project selected under section 999B; or

21 “(iii) to refinance long-term project
22 obligations or Federal credit instruments,
23 if the refinancing provides additional fund-
24 ing capacity for the completion, enhance-
25 ment, or expansion of any project that—

1 “(I) is selected under section
2 999B; or

3 “(II) otherwise meets the re-
4 quirements of that section; and

5 “(B) may be used in accordance with sub-
6 section (b)(7) to pay any fees collected by the
7 Secretary under subparagraph (B) of that sub-
8 section.

9 “(2) RISK ASSESSMENT.—Before entering into
10 an agreement under this subsection, the Secretary,
11 in consultation with the Director of the Office of
12 Management and Budget, shall determine an appro-
13 priate credit subsidy amount for each secured loan,
14 taking into account all relevant factors, including the
15 creditworthiness factors under section 999B(b)(2).

16 “(b) TERMS AND LIMITATIONS.—

17 “(1) IN GENERAL.—A secured loan under this
18 section with respect to a project shall be on such
19 terms and conditions and contain such covenants,
20 representations, warranties, and requirements (in-
21 cluding requirements for audits) as the Secretary de-
22 termines to be appropriate.

23 “(2) MAXIMUM AMOUNT.—The amount of a se-
24 cured loan under this section shall not exceed an

1 amount equal to 80 percent of the reasonably antici-
2 pated eligible project costs.

3 “(3) PAYMENT.—A secured loan under this sec-
4 tion shall be payable, in whole or in part, from—

5 “(A) user fees;

6 “(B) payments owing to the obligor under
7 a public-private partnership; or

8 “(C) other revenue sources that also secure
9 or fund the project obligations.

10 “(4) INTEREST RATE.—

11 “(A) IN GENERAL.—Except as provided in
12 subparagraph (B), the interest rate on a se-
13 cured loan under this section shall be not less
14 than the interest rate reflected in the yield on
15 United States Treasury securities of a similar
16 maturity to the maturity of the secured loan on
17 the date of execution of the loan agreement.

18 “(B) LIMITED BUYDOWNS.—

19 “(i) IN GENERAL.—Subject to clause
20 (iii), the Secretary may lower the interest
21 rate of a secured loan under this section to
22 not lower than the interest rate described
23 in clause (ii), if the interest rate has in-
24 creased during the period—

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1 “(I) beginning on, as applica-
2 ble—

3 “(aa) the date on which an
4 application acceptable to the Sec-
5 retary is submitted for the appli-
6 cable project; or

7 “(bb) the date on which the
8 Secretary entered into a master
9 credit agreement for the applica-
10 ble project; and

11 “(II) ending on the date on
12 which the Secretary executes the Fed-
13 eral credit instrument for the applica-
14 ble project that is the subject of the
15 secured loan.

16 “(ii) DESCRIPTION OF INTEREST
17 RATE.—The interest rate referred to in
18 clause (i) is the interest rate reflected in
19 the yield on United States Treasury securi-
20 ties of a similar maturity to the maturity
21 of the secured loan in effect, as applicable
22 to the project that is the subject of the se-
23 cured loan, on—

24 “(I) the date described in clause
25 (i)(I)(aa); or

1 “(II) the date described in clause
2 (i)(I)(bb).

3 “(iii) LIMITATION.—The interest rate
4 of a secured loan may not be lowered pur-
5 suant to clause (i) by more than 1½ per-
6 centage points (150 basis points).

7 “(5) MATURITY DATE.—The final maturity
8 date of the secured loan shall be the earlier of—

9 “(A) the date that is 35 years after the
10 date of substantial completion of the project;
11 and

12 “(B) if the useful life of the capital asset
13 being financed is of a lesser period, the date
14 that is the end of the useful life of the asset.

15 “(6) NONSUBORDINATION.—

16 “(A) IN GENERAL.—Except as provided in
17 subparagraph (B), the secured loan shall not be
18 subordinated to the claims of any holder of
19 project obligations in the event of bankruptcy,
20 insolvency, or liquidation of the obligor.

21 “(B) PREEXISTING INDENTURE.—

22 “(i) IN GENERAL.—The Secretary
23 shall waive the requirement under subpara-
24 graph (A) for a public agency borrower
25 that is financing ongoing capital programs

1 and has outstanding senior bonds under a
2 preexisting indenture, if—

3 “(I) the secured loan is rated in
4 the A category or higher; and

5 “(II) the secured loan is secured
6 and payable from pledged revenues
7 not affected by project performance,
8 such as a tax-backed revenue pledge
9 or a system-backed pledge of project
10 revenues.

11 “(ii) LIMITATION.—If the Secretary
12 waives the nonsubordination requirement
13 under this subparagraph—

14 “(I) the maximum credit subsidy
15 amount to be paid by the Federal
16 Government shall be not more than
17 10 percent of the principal amount of
18 the secured loan; and

19 “(II) the obligor shall be respon-
20 sible for paying the remainder of the
21 subsidy amount, if any.

22 “(7) FEES.—

23 “(A) IN GENERAL.—The Secretary may
24 collect a fee on or after the date of the financial
25 close of a Federal credit instrument under this

1 section in an amount equal to not more than
2 \$3,000,000 to cover all or a portion of the costs
3 to the Federal Government of providing the
4 Federal credit instrument.

5 “(B) AMENDMENT TO ADD COST OF FEES
6 TO SECURED LOAN.—If the Secretary collects a
7 fee from an obligor under subparagraph (A) to
8 cover all or a portion of the costs to the Federal
9 Government of providing a secured loan, the ob-
10 ligor and the Secretary may amend the terms
11 of the secured loan to add to the principal of
12 the secured loan an amount equal to the
13 amount of the fee collected by the Secretary.

14 “(8) MAXIMUM FEDERAL INVOLVEMENT.—The
15 total Federal assistance provided for a project under
16 the CIFIA program, including any grant provided
17 under section 999D, shall not exceed an amount
18 equal to 80 percent of the eligible project costs.

19 “(c) REPAYMENT.—

20 “(1) SCHEDULE.—The Secretary shall establish
21 a repayment schedule for each secured loan under
22 this section based on—

23 “(A) the projected cash flow from project
24 revenues and other repayment sources; and

25 “(B) the useful life of the project.

1 “(2) COMMENCEMENT.—Scheduled loan repay-
2 ments of principal or interest on a secured loan
3 under this section shall commence not later than 5
4 years after the date of substantial completion of the
5 project.

6 “(3) DEFERRED PAYMENTS.—

7 “(A) IN GENERAL.—If, at any time after
8 the date of substantial completion of a project,
9 the project is unable to generate sufficient reve-
10 nues in excess of reasonable and necessary op-
11 erating expenses to pay the scheduled loan re-
12 payments of principal and interest on the se-
13 cured loan, the Secretary may, subject to sub-
14 paragraph (C), allow the obligor to add unpaid
15 principal and interest to the outstanding bal-
16 ance of the secured loan.

17 “(B) INTEREST.—Any payment deferred
18 under subparagraph (A) shall—

19 “(i) continue to accrue interest in ac-
20 cordance with subsection (b)(4) until fully
21 repaid; and

22 “(ii) be scheduled to be amortized
23 over the remaining term of the loan.

24 “(C) CRITERIA.—

1 “(i) IN GENERAL.—Any payment de-
2 ferral under subparagraph (A) shall be
3 contingent on the project meeting criteria
4 established by the Secretary.

5 “(ii) REPAYMENT STANDARDS.—The
6 criteria established pursuant to clause (i)
7 shall include standards for the reasonable
8 prospect of repayment.

9 “(4) PREPAYMENT.—

10 “(A) USE OF EXCESS REVENUES.—Any
11 excess revenues that remain after satisfying
12 scheduled debt service requirements on the
13 project obligations and secured loan and all de-
14 posit requirements under the terms of any trust
15 agreement, bond resolution, or similar agree-
16 ment securing project obligations may be ap-
17 plied annually to prepay the secured loan, with-
18 out penalty.

19 “(B) USE OF PROCEEDS OF REFI-
20 NANCING.—A secured loan may be prepaid at
21 any time without penalty from the proceeds of
22 refinancing from non-Federal funding sources.

23 “(d) SALE OF SECURED LOANS.—

24 “(1) IN GENERAL.—Subject to paragraph (2),
25 as soon as practicable after substantial completion of

1 a project and after notifying the obligor, the Sec-
2 retary may sell to another entity or reoffer into the
3 capital markets a secured loan for the project if the
4 Secretary determines that the sale or reoffering can
5 be made on favorable terms.

6 “(2) CONSENT OF OBLIGOR.—In making a sale
7 or reoffering under paragraph (1), the Secretary
8 may not change any original term or condition of the
9 secured loan without the written consent of the obli-
10 gor.

11 “(e) LOAN GUARANTEES.—

12 “(1) IN GENERAL.—The Secretary may provide
13 a loan guarantee to a lender in lieu of making a se-
14 cured loan under this section if the Secretary deter-
15 mines that the budgetary cost of the loan guarantee
16 is substantially the same as, or less than, that of a
17 secured loan.

18 “(2) TERMS.—The terms of a loan guarantee
19 under paragraph (1) shall be consistent with the
20 terms required under this section for a secured loan,
21 except that the rate on the guaranteed loan and any
22 prepayment features shall be negotiated between the
23 obligor and the lender, with the consent of the Sec-
24 retary.

1 **“SEC. 999D. FUTURE GROWTH GRANTS.**

2 “(a) ESTABLISHMENT.—The Secretary may provide
3 grants to pay a portion of the cost differential, with re-
4 spect to any projected future increase in demand for car-
5 bon dioxide transportation by an infrastructure project de-
6 scribed in subsection (b), between—

7 “(1) the cost of constructing the infrastructure
8 asset with the capacity to transport an increased
9 flow rate of carbon dioxide, as made practicable
10 under the project; and

11 “(2) the cost of constructing the infrastructure
12 asset with the capacity to transport carbon dioxide
13 at the flow rate initially required, based on commit-
14 ments for the use of the asset.

15 “(b) ELIGIBILITY.—To be eligible to receive a grant
16 under this section, an entity shall—

17 “(1) be eligible to receive credit assistance
18 under the CIFIA program;

19 “(2) carry out, or propose to carry out, a
20 project for large-capacity, common carrier infra-
21 structure with a probable future increase in demand
22 for carbon dioxide transportation; and

23 “(3) submit to the Secretary an application at
24 such time, in such manner, and containing such in-
25 formation as the Secretary determines to be appro-
26 priate.

1 “(c) USE OF FUNDS.—A grant provided under this
2 section may be used only to pay the costs of any additional
3 flow rate capacity of a carbon dioxide transportation infra-
4 structure asset that the project sponsor demonstrates to
5 the satisfaction of the Secretary can reasonably be ex-
6 pected to be used during the 20-year period beginning on
7 the date of substantial completion of the project described
8 in subsection (b)(2).

9 “(d) MAXIMUM AMOUNT.—The amount of a grant
10 provided under this section may not exceed an amount
11 equal to 80 percent of the cost of the additional capacity
12 described in subsection (a).

13 **“SEC. 999E. PROGRAM ADMINISTRATION.**

14 “(a) REQUIREMENT.—The Secretary shall establish
15 a uniform system to service the Federal credit instruments
16 provided under the CIFIA program.

17 “(b) FEES.—If funding sufficient to cover the costs
18 of services of expert firms retained pursuant to subsection
19 (d) and all or a portion of the costs to the Federal Govern-
20 ment of servicing the Federal credit instruments is not
21 provided in an appropriations Act for a fiscal year, the
22 Secretary, during that fiscal year, may collect fees on or
23 after the date of the financial close of a Federal credit
24 instrument provided under the CIFIA program at a level
25 that is sufficient to cover those costs.

1 “(c) SERVICER.—

2 “(1) IN GENERAL.—The Secretary may appoint
3 a financial entity to assist the Secretary in servicing
4 the Federal credit instruments.

5 “(2) DUTIES.—A servicer appointed under
6 paragraph (1) shall act as the agent for the Sec-
7 retary.

8 “(3) FEE.—A servicer appointed under para-
9 graph (1) shall receive a servicing fee, subject to ap-
10 proval by the Secretary.

11 “(d) ASSISTANCE FROM EXPERT FIRMS.—The Sec-
12 retary may retain the services of expert firms, including
13 counsel, in the field of municipal and project finance to
14 assist in the underwriting and servicing of Federal credit
15 instruments.

16 “(e) EXPEDITED PROCESSING.—The Secretary shall
17 implement procedures and measures to economize the time
18 and cost involved in obtaining approval and the issuance
19 of credit assistance under the CIFIA program.

20 **“SEC. 999F. STATE AND LOCAL PERMITS.**

21 “The provision of credit assistance under the CIFIA
22 program with respect to a project shall not—

23 “(1) relieve any recipient of the assistance of
24 any project obligation to obtain any required State

1 or local permit or approval with respect to the
2 project;

3 “(2) limit the right of any unit of State or local
4 government to approve or regulate any rate of re-
5 turn on private equity invested in the project; or

6 “(3) otherwise supersede any State or local law
7 (including any regulation) applicable to the construc-
8 tion or operation of the project.

9 **“SEC. 999G. REGULATIONS.**

10 “The Secretary may promulgate such regulations as
11 the Secretary determines to be appropriate to carry out
12 the CIFLA program.

13 **“SEC. 999H. FUNDING.**

14 “(a) FUNDING.—

15 “(1) APPROPRIATIONS.—In addition to
16 amounts otherwise made available, there is appro-
17 priated to the Secretary to carry out this subtitle,
18 out of any amounts in the Treasury not otherwise
19 appropriated—

20 “(A) \$600,000,000 for each of fiscal years
21 2022 and 2023; and

22 “(B) \$300,000,000 for each of fiscal years
23 2024 through 2026.

24 “(2) SPENDING AND BORROWING AUTHOR-
25 ITY.—Spending and borrowing authority for a fiscal

1 year to enter into Federal credit instruments shall
2 be promptly apportioned to the Secretary on a fiscal-
3 year basis.

4 “(3) REESTIMATES.—If the subsidy amount of
5 a Federal credit instrument is reestimated, the cost
6 increase or decrease of the reestimate shall be borne
7 by, or benefit, the general fund of the Treasury, con-
8 sistent with section 504(f) of the Congressional
9 Budget Act of 1974 (2 U.S.C. 661c(f)).

10 “(4) ADMINISTRATIVE COSTS.—Of the amounts
11 made available to carry out the CIFIA program, the
12 Secretary may use not more than \$9,000,000 (as in-
13 dexed for United States dollar inflation from the
14 date of enactment of the Energy Infrastructure Act
15 (as measured by the Consumer Price Index)) each
16 fiscal year for the administration of the CIFIA pro-
17 gram.

18 “(b) CONTRACT AUTHORITY.—

19 “(1) IN GENERAL.—Notwithstanding any other
20 provision of law, execution of a term sheet by the
21 Secretary of a Federal credit instrument that uses
22 amounts made available under the CIFIA program
23 shall impose on the United States a contractual obli-
24 gation to fund the Federal credit investment.

1 “(2) AVAILABILITY.—Amounts made available
2 to carry out the CIFLA program for a fiscal year
3 shall be available for obligation on October 1 of the
4 fiscal year.”.

5 (b) TECHNICAL AMENDMENTS.—The table of con-
6 tents for the Energy Policy Act of 2005 (Public Law 109–
7 58; 119 Stat. 600) is amended—

8 (1) in the item relating to section 917, by strik-
9 ing “Efficiency”;

10 (2) by striking the items relating to subtitle J
11 of title IX (relating to ultra-deepwater and uncon-
12 ventional natural gas and other petroleum resources)
13 and inserting the following:

 “Subtitle J—Carbon Dioxide Transportation Infrastructure Finance and
 Innovation

 “Sec. 999A. Definitions.

 “Sec. 999B. Determination of eligibility and project selection.

 “Sec. 999C. Secured loans.

 “Sec. 999D. Future growth grants.

 “Sec. 999E. Program administration.

 “Sec. 999F. State and local permits.

 “Sec. 999G. Regulations.

 “Sec. 999H. Funding.”; and

14 (3) by striking the item relating to section
15 969B and inserting the following:

 “Sec. 969B. High efficiency turbines.”.

16 **SEC. 3005. CARBON STORAGE VALIDATION AND TESTING.**

17 Section 963 of the Energy Policy Act of 2005 (42
18 U.S.C. 16293) is amended—

1 (1) in subsection (a)(1)(B), by striking “over a
2 10-year period”;

3 (2) in subsection (b)—

4 (A) in paragraph (1), by striking “and
5 demonstration” and inserting “demonstration,
6 and commercialization”; and

7 (B) in paragraph (2)—

8 (i) in subparagraph (G), by striking
9 “and” at the end;

10 (ii) in subparagraph (H), by striking
11 the period at the end and inserting “;
12 and”; and

13 (iii) by adding at the end the fol-
14 lowing:

15 “(I) evaluating the quantity, lo-
16 cation, and timing of geologic carbon
17 storage deployment that may be need-
18 ed, and developing strategies and re-
19 sources to enable the deployment.”;

20 (3) by redesignating subsections (e) through (g)
21 as subsections (f) through (h), respectively;

22 (4) by inserting after subsection (d) the fol-
23 lowing:

24 “(e) LARGE-SCALE CARBON STORAGE COMMER-
25 CIALIZATION PROGRAM.—

1 “(1) IN GENERAL.—The Secretary shall estab-
2 lish a commercialization program under which the
3 Secretary shall provide funding for the development
4 of new or expanded commercial large-scale carbon
5 sequestration projects and associated carbon dioxide
6 transport infrastructure, including funding for the
7 feasibility, site characterization, permitting, and con-
8 struction stages of project development.

9 “(2) APPLICATIONS; SELECTION.—

10 “(A) IN GENERAL.—To be eligible to enter
11 into an agreement with the Secretary for fund-
12 ing under paragraph (1), an entity shall submit
13 to the Secretary an application at such time, in
14 such manner, and containing such information
15 as the Secretary determines to be appropriate.

16 “(B) APPLICATION PROCESS.—The Sec-
17 retary shall establish an application process
18 that, to the maximum extent practicable—

19 “(i) is open to projects at any stage of
20 development described in paragraph (1);
21 and

22 “(ii) facilitates expeditious develop-
23 ment of projects described in that para-
24 graph.

1 “(C) PROJECT SELECTION.—In selecting
2 projects for funding under paragraph (1), the
3 Secretary shall give priority to—

4 “(i) projects with substantial carbon
5 dioxide storage capacity; or

6 “(ii) projects that will store carbon di-
7 oxide from multiple carbon capture facili-
8 ties.”;

9 (5) in subsection (f) (as so redesignated), in
10 paragraph (1), by inserting “with respect to the re-
11 search, development, demonstration program compo-
12 nents described in subsections (b) through (d)” be-
13 fore “give preference”; and

14 (6) by striking subsection (h) (as so redesign-
15 ated) and inserting the following:

16 “(h) APPROPRIATIONS.—In addition to amounts oth-
17 erwise made available, there is appropriated to the Sec-
18 retary to carry out this section, out of any amounts in
19 the Treasury not otherwise appropriated, \$500,000,000
20 for each of fiscal years 2022 through 2026.”.

21 **SEC. 3006. SECURE GEOLOGIC STORAGE PERMITTING.**

22 (a) DEFINITIONS.—In this section:

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

1 (2) CLASS VI WELL.—The term “Class VI well”
2 means a well described in section 144.6(f) of title
3 40, Code of Federal Regulations (or successor regu-
4 lations).

5 (b) GEOLOGIC SEQUESTRATION PERMITTING.—In
6 addition to amounts otherwise made available, there is ap-
7 propriated to the Administrator for the permitting of
8 Class VI wells by the Administrator for the injection of
9 carbon dioxide for the purpose of geologic sequestration
10 in accordance with the requirements of the Safe Drinking
11 Water Act (42 U.S.C. 300f et seq.) and the final rule of
12 the Administrator entitled “Federal Requirements Under
13 the Underground Injection Control (UIC) Program for
14 Carbon Dioxide (CO₂) Geologic Sequestration (GS) Wells”
15 (75 Fed. Reg. 77230 (December 10, 2010)), out of any
16 amounts not otherwise appropriated, \$5,000,000 for each
17 of fiscal years 2022 through 2026.

18 (c) STATE PERMITTING PROGRAM GRANTS.—

19 (1) ESTABLISHMENT.—The Administrator shall
20 award grants to States that, pursuant to section
21 1422 of the Safe Drinking Water Act (42 U.S.C.
22 300h–1), receive the approval of the Administrator
23 for a State underground injection control program
24 for permitting Class VI wells for the injection of car-
25 bon dioxide.

1 (2) USE OF FUNDS.—A State that receives a
2 grant under paragraph (1) shall use the amounts re-
3 ceived under the grant to defray the expenses of the
4 State related to the establishment and operation of
5 a State underground injection control program de-
6 scribed in paragraph (1).

7 (3) APPROPRIATIONS.—In addition to amounts
8 otherwise made available, there is appropriated to
9 the Administrator to carry out this subsection, out
10 of any amounts in the Treasury not otherwise appro-
11 priated, \$50,000,000 for each of fiscal years 2022
12 through 2026.

13 **SEC. 3007. GEOLOGIC CARBON SEQUESTRATION ON THE**
14 **OUTER CONTINENTAL SHELF.**

15 (a) DEFINITIONS.—Section 2 of the Outer Conti-
16 nental Shelf Lands Act (43 U.S.C. 1331) is amended—

17 (1) in the matter preceding subsection (a), by
18 striking “When used in this Act—” and inserting
19 “In this Act:”;

20 (2) in each subsection, by inserting a subsection
21 heading, the text of which is comprised of the term
22 defined in the subsection;

23 (3) by striking the semicolon at the end of each
24 subsection (other than subsection (q)) and “; and”

1 at the end of subsection (p) and inserting a period;
2 and

3 (4) by adding at the end the following:

4 “(r) CARBON DIOXIDE STREAM.—

5 “(1) IN GENERAL.—The term ‘carbon dioxide
6 stream’ means carbon dioxide that—

7 “(A) has been captured; and

8 “(B) consists overwhelmingly of—

9 “(i) carbon dioxide plus incidental as-
10 sociated substances derived from the
11 source material or capture process; and

12 “(ii) any substances added to the
13 stream for the purpose of enabling or im-
14 proving the injection process.

15 “(2) EXCLUSIONS.—The term ‘carbon dioxide
16 stream’ does not include waste or other matter
17 added to the carbon dioxide stream for the purpose
18 of disposal.

19 “(s) CARBON SEQUESTRATION.—The term ‘carbon
20 sequestration’ means the act of storing carbon dioxide that
21 has been captured through physical, chemical, or biological
22 processes that can prevent the carbon dioxide from reach-
23 ing the atmosphere.”.

24 (b) LEASES, EASEMENTS, OR RIGHTS-OF-WAY FOR
25 ENERGY AND RELATED PURPOSES.—Section 8(p)(1) of

1 the Outer Continental Shelf Lands Act (43 U.S.C.
2 1337(p)(1)) is amended—

3 (1) in subparagraph (C), by striking “or” after
4 the semicolon;

5 (2) in subparagraph (D), by striking the period
6 at the end and inserting “; or”; and

7 (3) by adding at the end the following:

8 “(E) provide for, support, or are directly
9 related to the injection of a carbon dioxide
10 stream into sub-seabed geologic formations for
11 the purpose of long-term carbon sequestra-
12 tion.”.

13 (c) CLARIFICATION.—A carbon dioxide stream in-
14 jected for the purpose of carbon sequestration under sub-
15 paragraph (E) of section 8(p)(1) of the Outer Continental
16 Shelf Lands Act (43 U.S.C. 1337(p)(1)) shall not be con-
17 sidered to be material (as defined in section 3 of the Ma-
18 rine Protection, Research, and Sanctuaries Act of 1972
19 (33 U.S.C. 1402)) for purposes of that Act (33 U.S.C.
20 1401 et seq.).

21 (d) REGULATIONS.—Not later than 1 year after the
22 date of enactment of this Act, the Secretary of the Interior
23 shall promulgate regulations to carry out the amendments
24 made by this section.

1 **SEC. 3008. CARBON REMOVAL.**

2 (a) IN GENERAL.—Section. 969D. CARBON RE-
3 MOVAL of subtitle F of title IX of the Energy Policy Act
4 of 2005 (42 U.S.C. 16291 et seq.) is further amended by
5 adding at the end the following:

6 “(k) REGIONAL DIRECT AIR CAPTURE HUBS.—

7 “(1) DEFINITION OF REGIONAL DIRECT AIR
8 CAPTURE HUB.—In this section, the term ‘regional
9 clean direct air capture hub’ means a network of di-
10 rect air capture projects, potential carbon dioxide
11 utilization off-takers, and connective infrastructure
12 located in close proximity.

13 “(2) ESTABLISHMENT OF PROGRAM.—The Sec-
14 retary shall establish a program to support the de-
15 velopment of 4 regional direct air capture hubs
16 that—

17 “(A) demonstrably aid the achievement of
18 capturing carbon dioxide directly from the at-
19 mosphere;

20 “(B) each have the capacity to capture and
21 sequester at least one million metric tons of
22 carbon dioxide annually;

23 “(C) demonstrate the capture, processing,
24 delivery, and storage or end-use of captured
25 carbon; and

1 “(D) can be developed into a national car-
2 bon network to facilitate sequestration or car-
3 bon utilization.

4 “(3) SELECTION OF REGIONAL DIRECT AIR
5 CAPTURE HUBS.—

6 “(A) SOLICITATION OF PROPOSALS.—Not
7 later than 180 days after the date of enactment
8 of the Energy Infrastructure Act, the Secretary
9 shall solicit proposals for regional clean direct
10 air capture hubs.

11 “(B) SELECTION OF HUBS.—Not later
12 than 1 year after the deadline for the submis-
13 sion of proposals under paragraph (1), the Sec-
14 retary shall select 4 regional direct air capture
15 hubs to be developed under subsection (b).

16 “(C) CRITERIA.—The Secretary shall se-
17 lect regional clean direct air capture hubs under
18 paragraph (2) using the following criteria:

19 “(i) CARBON INTENSITY OF LOCAL IN-
20 DUSTRY.—To the maximum extent prac-
21 ticable, each direct air capture hub shall be
22 located in a region with existing carbon in-
23 tensive fuel production or industrial capac-
24 ity, or such capacity that has retired or
25 closed in the preceding 10 years.

1 “(ii) GEOGRAPHIC DIVERSITY.—To
2 the maximum extent practicable, each re-
3 gional clean direct air capture hub shall be
4 located in a different region of the United
5 States.

6 “(iii) CARBON POTENTIAL.—To the
7 maximum extent practicable, each regional
8 direct air capture hub shall be located in a
9 region with high potential for carbon se-
10 questration or utilization.

11 “(iv) HUBS IN FOSSIL-PRODUCING RE-
12 GIONS.—To the maximum extent prac-
13 ticable, at least 2 regional direct air cap-
14 ture hubs shall be located in economically
15 distressed communities in the regions of
16 the United States with high levels of coal
17 or shale gas resources.

18 “(v) EMPLOYMENT.—The Secretary
19 shall give priority to regional direct air
20 capture hubs that are likely to create op-
21 portunities for skilled training and long-
22 term employment to the greatest number
23 of residents of the region.

24 “(vi) ADDITIONAL CRITERIA.—The
25 Secretary may take into consideration

1 other criteria that, in the judgement of the
2 Secretary, are necessary or appropriate to
3 carry out this title.

4 “(D) FUNDING OF REGIONAL DIRECT AIR
5 CAPTURE HUBS.—The Secretary may make
6 grants or enter into cooperative agreements or
7 contracts to each regional direct air capture se-
8 lected under paragraph (2) to accelerate com-
9 mercialization of, and demonstrate the capture,
10 processing, delivery, storage, and end-use of
11 carbon from the atmosphere.

12 “(4) APPROPRIATIONS.—In addition to
13 amounts otherwise made available, there is appro-
14 priated to the Secretary to carry out this section,
15 out of any amounts in the Treasury not otherwise
16 appropriated, \$3,500,000,000 for the period of fiscal
17 years 2022 through 2026.”.

18 **Subtitle B—Hydrogen Research** 19 **and Development**

20 **SEC. 3101. FINDINGS; PURPOSE.**

21 (a) FINDINGS.—Congress finds that—

22 (1) hydrogen plays a critical part in the com-
23 prehensive energy portfolio of the United States;

24 (2) the use of the hydrogen resources of the
25 United States—

1 (A) promotes energy security and resili-
2 ence; and

3 (B) provides economic value and environ-
4 mental benefits for diverse applications across
5 multiple sectors of the economy; and

6 (3) hydrogen can be produced from a variety of
7 domestically available clean energy sources, includ-
8 ing—

9 (A) renewable energy resources, including
10 biomass;

11 (B) fossil fuels with carbon capture, utili-
12 zation, and storage; and

13 (C) nuclear power.

14 (b) PURPOSE.—The purpose of this subtitle is to ac-
15 celerate research, development, demonstration, and de-
16 ployment of hydrogen from clean energy sources by—

17 (1) providing a statutory definition for the term
18 “clean hydrogen”;

19 (2) establishing a clean hydrogen strategy and
20 roadmap for the United States;

21 (3) establishing a clearing house for clean hy-
22 drogen program information at the National Energy
23 Technology Laboratory;

24 (4) developing a robust clean hydrogen supply
25 chain and workforce by prioritizing clean hydrogen

1 demonstration projects in economically distressed
2 communities in major shale gas regions;

3 (5) establishing regional clean hydrogen hubs;
4 and

5 (6) authorizing appropriations to carry out the
6 Department of Energy Hydrogen Program Plan,
7 dated November 2020, developed pursuant to title
8 VIII of the Energy Policy Act of 2005 (42 U.S.C.
9 16151 et seq.).

10 **SEC. 3102. DEFINITIONS.**

11 Section 803 of the Energy Policy Act of 2005 (42
12 U.S.C. 16152) is amended—

13 (1) in paragraph (5), by striking the paragraph
14 designation and heading and all that follows through
15 “when” in the matter preceding subparagraph (A)
16 and inserting the following:

17 “(5) PORTABLE; STORAGE.—The terms ‘port-
18 able’ and ‘storage’, when”;

19 (2) by redesignating paragraphs (1) through
20 (7) as paragraphs (2) through (8), respectively; and

21 (3) by inserting before paragraph (2) (as so re-
22 designated) the following:

23 “(1) CLEAN HYDROGEN; HYDROGEN.—The
24 terms ‘clean hydrogen’ and ‘hydrogen’ mean hydro-
25 gen produced in compliance with the greenhouse gas

1 emissions standard established under section 822(a),
2 including production from any fuel source.”.

3 **SEC. 3103. CLEAN HYDROGEN RESEARCH AND DEVELOP-**
4 **MENT PROGRAM.**

5 (a) IN GENERAL.—Section 805 of the Energy Policy
6 Act of 2005 (42 U.S. 16154) is amended—

7 (1) in the section heading, by striking “**PRO-**
8 **GRAMS**” and inserting “**CLEAN HYDROGEN RE-**
9 **SEARCH AND DEVELOPMENT PROGRAM**”;

10 (2) in subsection (a)—

11 (A) by striking “research and development
12 program” and inserting “crosscutting research
13 and development program (referred to in this
14 section as the ‘program’)”; and

15 (B) by inserting “processing,” after “pro-
16 duction,”;

17 (3) by striking subsection (b) and inserting the
18 following:

19 “(b) GOALS.—The goals of the program shall be—

20 “(1) to advance research and development to
21 demonstrate and commercialize the use of clean hy-
22 drogen in the transportation, utility, industrial, com-
23 mercial, and residential sectors; and

1 “(2) to demonstrate a standard of clean hydro-
2 gen production in the transportation, utility, indus-
3 trial, commercial, and residential sectors by 2040.”;

4 (4) in subsection (c)(3), by striking “renewable
5 fuels and biofuels” and inserting “fossil fuels with
6 carbon capture, utilization, and sequestration, re-
7 newable fuels, biofuels, and nuclear energy”;

8 (5) by striking subsection (e) and inserting the
9 following:

10 “(e) ACTIVITIES.—In carrying out the program, the
11 Secretary, in partnership with the private sector, shall
12 conduct activities to advance and support—

13 “(1) the establishment of a series of technology
14 cost goals oriented toward achieving the standard of
15 clean hydrogen production **【**developed under section
16 822(a)**】**;

17 “(2) the production of clean hydrogen from di-
18 verse energy sources, including—

19 “(A) fossil fuels with carbon capture, utili-
20 zation, and sequestration;

21 “(B) hydrogen-carrier fuels (including eth-
22 anol and methanol);

23 “(C) renewable energy resources, including
24 biomass;

25 “(D) nuclear energy; and

1 “(E) any other methods the Secretary de-
2 termines to be appropriate;

3 “(3) the use of clean hydrogen for commercial,
4 industrial, and residential electric power generation;

5 “(4) the use of clean hydrogen in industrial ap-
6 plications, including steelmaking, cement, chemical
7 feedstocks, and process heat;

8 “(5) the use of clean hydrogen for use as a fuel
9 source for both residential and commercial comfort
10 heating and hot water requirements;

11 “(6) the safe and efficient delivery of hydrogen
12 or hydrogen-carrier fuels, including—

13 “(A) transmission by pipelines, including
14 retrofitting the existing natural gas transpor-
15 tation infrastructure system to enable a transi-
16 tion to transport and deliver increasing levels of
17 clean hydrogen, clean hydrogen blends, or clean
18 hydrogen carriers;

19 “(B) tanks and other distribution methods;
20 and

21 “(C) convenient and economic refueling of
22 vehicles—

23 “(i) at central refueling stations; or

24 “(ii) through distributed onsite gen-
25 eration;

1 “(7) advanced vehicle technologies, including—

2 “(A) engine and emission control systems;

3 “(B) energy storage, electric propulsion,

4 and hybrid systems;

5 “(C) automotive materials; and

6 “(D) other advanced vehicle technologies;

7 “(8) storage of hydrogen or hydrogen-carrier

8 fuels, including the development of materials for safe

9 and economic storage in gaseous, liquid, or solid

10 form;

11 “(9) the development of safe, durable, afford-

12 able, and efficient fuel cells, including fuel-flexible

13 fuel cell power systems, improved manufacturing

14 processes, high-temperature membranes, cost-effec-

15 tive fuel processing for natural gas, fuel cell stack

16 and system reliability, low-temperature operation,

17 and cold start capability; and

18 “(10) the ability of domestic clean hydrogen

19 equipment manufacturers to manufacture commer-

20 cially available competitive technologies in the

21 United States.”; and

22 (6) by adding at the end the following:

23 “(j) TARGETS.—Not later than 180 days after the

24 date of enactment of the Energy Infrastructure Act, the

25 Secretary shall establish targets for the program to ad-

1 dress near-term (up to 2 years), mid-term (up to 7 years),
2 and long-term (up to 15 years) challenges to the advance-
3 ment of clean hydrogen systems and technologies.”.

4 (b) CONFORMING AMENDMENT.—The table of con-
5 tents for the Energy Policy Act of 2005 (Public Law 109–
6 58; 119 Stat. 599) is amended by striking the item relat-
7 ing to section 805 and inserting the following:

“Sec. 805. Clean hydrogen research and development program.”.

8 **SEC. 3104. ADDITIONAL CLEAN HYDROGEN PROGRAMS.**

9 Title VIII of the Energy Policy Act of 2005 (42
10 U.S.C. 16151 et seq.) is amended—

11 (1) by redesignating sections 813 through 816
12 as sections 818 through 821, respectively; and

13 (2) by inserting after section 812 the following:

14 **“SEC. 813. REGIONAL CLEAN HYDROGEN HUBS.**

15 “(a) DEFINITION OF REGIONAL CLEAN HYDROGEN
16 HUB.—In this section, the term ‘regional clean hydrogen
17 hub’ means a network of clean hydrogen producers, poten-
18 tial clean hydrogen consumers, and connective infrastruc-
19 ture located in close proximity.

20 “(b) ESTABLISHMENT OF PROGRAM.—The Secretary
21 shall establish a program to support the development of
22 4 regional clean hydrogen hubs that—

23 “(1) demonstrably aid the achievement of the
24 clean hydrogen production standard **【developed**
25 **under section 822(a)】**;

1 “(2) demonstrate the production, processing,
2 delivery, storage, and end-use of clean hydrogen; and

3 “(3) can be developed into a national clean hy-
4 drogen network to facilitate a clean hydrogen econ-
5 omy.

6 “(c) SELECTION OF REGIONAL CLEAN HYDROGEN
7 HUBS.—

8 “(1) SOLICITATION OF PROPOSALS.—Not later
9 than 180 days after the date of enactment of the
10 Energy Infrastructure Act, the Secretary shall solicit
11 proposals for regional clean hydrogen hubs.

12 “(2) SELECTION OF HUBS.—Not later than 1
13 year after the deadline for the submission of pro-
14 posals under paragraph (1), the Secretary shall se-
15 lect 4 regional clean hydrogen hubs to be developed
16 under subsection (b).

17 “(3) CRITERIA.—The Secretary shall select re-
18 gional clean hydrogen hubs under paragraph (2)
19 using the following criteria:

20 “(A) FEEDSTOCK AND END-USE DIVER-
21 SITY.—To the maximum extent practicable, at
22 least 1 regional clean hydrogen hub shall dem-
23 onstrate—

24 “(i) the production of clean hydrogen
25 from—

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- 1 “(I) fossil fuels;
- 2 “(II) renewable energy; and
- 3 “(III) nuclear energy; and
- 4 “(ii) the end-use of clean hydrogen
- 5 in—
- 6 “(I) the electric power generation
- 7 sector;
- 8 “(II) the industrial sector;
- 9 “(III) the residential and com-
- 10 mercial heating sector; and
- 11 “(IV) the transportation sector.
- 12 “(B) GEOGRAPHIC DIVERSITY.—To the
- 13 maximum extent practicable, each regional
- 14 clean hydrogen hub—
- 15 “(i) shall be located in a different re-
- 16 gion of the United States; and
- 17 “(ii) shall use energy resources that
- 18 are abundant in that region.
- 19 “(C) HUBS IN NATURAL GAS-PRODUCING
- 20 REGIONS.—To the maximum extent practicable,
- 21 at least 2 regional clean hydrogen hubs shall be
- 22 located in economically distressed communities
- 23 in the regions of the United States with the
- 24 greatest shale gas resources.

1 “(D) EMPLOYMENT.—The Secretary shall
2 give priority to regional clean hydrogen hubs
3 that are likely to create opportunities for skilled
4 training and long-term employment to the
5 greatest number of residents of the region.

6 “(E) ADDITIONAL CRITERIA.—The Sec-
7 retary may take into consideration other cri-
8 teria that, in the judgement of the Secretary,
9 are necessary or appropriate to carry out this
10 title

11 “(4) FUNDING OF REGIONAL CLEAN HYDROGEN
12 HUBS.—The Secretary may make grants to each re-
13 gional clean hydrogen hub selected under paragraph
14 (2) to accelerate commercialization of, and dem-
15 onstrate the production, processing, delivery, stor-
16 age, and end-use of, clean hydrogen.

17 “(d) APPROPRIATIONS.—In addition to amounts oth-
18 erwise made available, there is appropriated to the Sec-
19 retary to carry out this section, out of any amounts in
20 the Treasury not otherwise appropriated, \$8,000,000,000
21 for the period of fiscal years 2022 through 2026.

22 **“SEC. 814. NATIONAL CLEAN HYDROGEN STRATEGY AND**
23 **ROADMAP.**

24 “(a) DEVELOPMENT.—

1 “(1) IN GENERAL.—In carrying out the pro-
2 grams established under sections 805 and 813, the
3 Secretary, in consultation with the heads of relevant
4 offices of the Department, shall develop a national
5 strategy and roadmap to facilitate widescale produc-
6 tion, processing, delivery, storage, and use of clean
7 hydrogen.

8 “(2) INCLUSIONS.—The national clean hydro-
9 gen strategy and roadmap developed under para-
10 graph (1) shall focus on—

11 “(A) establishing a standard of hydrogen
12 production that achieves the standard [devel-
13 oped under section 822(a)], including interim
14 goals towards meeting that standard;

15 “(B)(i) clean hydrogen production and use
16 from natural gas, coal, renewable energy
17 sources, nuclear energy, and biomass; and

18 “(ii) identifying potential barriers, path-
19 ways, and opportunities, including Federal pol-
20 icy needs, to transition to a clean hydrogen
21 economy;

22 “(C) identifying—

23 “(i) economic opportunities for the
24 production, processing, transport, storage,
25 and use of clean hydrogen that exist in the

1 major shale natural gas-producing regions
2 of the United States; and

3 “(ii) environmental risks associated
4 with potential deployment of clean hydro-
5 gen technologies in those regions, and ways
6 to mitigate those risks;

7 “(D) approaches, including substrategies,
8 that reflect geographic diversity across the
9 country, to advance clean hydrogen based on re-
10 sources, industry sectors, environmental bene-
11 fits, and economic impacts in regional econo-
12 mies;

13 “(E) identifying opportunities to use, and
14 barriers to using, existing infrastructure, in-
15 cluding all components of the natural gas infra-
16 structure system, the carbon dioxide pipeline in-
17 frastructure system, end-use local distribution
18 networks, end-use power generators, LNG ter-
19 minals, industrial users of natural gas, and res-
20 idential and commercial consumers of natural
21 gas, for clean hydrogen deployment;

22 “(F) identifying the needs for and barriers
23 and pathways to developing clean hydrogen
24 hubs (including, where appropriate, clean hy-

1 drogen hubs coupled with carbon capture, utili-
2 zation, and storage hubs) that—

3 “(i) are regionally dispersed across
4 the United States and can leverage natural
5 gas shale plays to the maximum extent
6 practicable;

7 “(ii) can demonstrate the efficient
8 production, processing, delivery, and use of
9 clean hydrogen;

10 “(iii) include transportation corridors
11 and modes of transportation, including
12 transportation of clean hydrogen by pipe-
13 line and rail and through ports; and

14 “(iv) where appropriate, could serve
15 as joint clean hydrogen and carbon cap-
16 ture, utilization, and storage hubs;

17 “(G) prioritizing activities that improve the
18 ability of the Department to develop tools to
19 model, analyze, and optimize single-input, mul-
20 tiple-output integrated hybrid energy systems
21 and multiple-input, multiple-output integrated
22 hybrid energy systems that maximize efficiency
23 in providing hydrogen, high-value heat, elec-
24 tricity, and chemical synthesis services;

1 “(H) identifying the appropriate points of
2 interaction between and among Federal agen-
3 cies involved in the production, processing, de-
4 livery, storage, and use of clean hydrogen and
5 clarifying the responsibilities of those Federal
6 agencies, and potential regulatory obstacles and
7 recommendations for modifications, in order to
8 support the deployment of clean hydrogen; and

9 “(I) identifying geographic zones or re-
10 gions in which clean hydrogen technologies
11 could efficiently and economically be introduced
12 in order to transition existing infrastructure to
13 rely on clean hydrogen, in support of
14 decarbonizing all relevant sectors of the econ-
15 omy.

16 “(b) REPORTS TO CONGRESS.—

17 “(1) IN GENERAL.—Not later than 180 days
18 after the date of enactment of the Energy Infra-
19 structure Act, the Secretary shall submit to Con-
20 gress the clean hydrogen strategy and roadmap de-
21 veloped under subsection (a).

22 “(2) UPDATES.—The Secretary shall submit to
23 Congress updates to the clean hydrogen strategy and
24 roadmap under paragraph (1) not less frequently

1 than once every 3 years after the date on which the
2 Secretary initially submits the report and roadmap.

3 **“SEC. 815. CLEAN HYDROGEN MANUFACTURING AND RECY-**
4 **CLING.**

5 “(a) CLEAN HYDROGEN MANUFACTURING INITIA-
6 TIVE.—

7 “(1) IN GENERAL.—In carrying out the pro-
8 grams established under sections 805 and 813, the
9 Secretary shall award multiyear grants to, and enter
10 into contracts, cooperative agreements, or any other
11 agreements authorized under this Act or other Fed-
12 eral law with, eligible entities (as determined by the
13 Secretary) for research, development, and dem-
14 onstration projects to advance new clean hydrogen
15 production, processing, delivery, storage, and use
16 equipment manufacturing technologies and tech-
17 niques.

18 “(2) PRIORITY.—In awarding grants or enter-
19 ing into contracts, cooperative agreements, or other
20 agreements under paragraph (1), the Secretary, to
21 the maximum extent practicable, shall give priority
22 to clean hydrogen equipment manufacturing projects
23 that—

24 “(A) increase efficiency and cost-effective-
25 ness in—

1 “(i) the manufacturing process; and
2 “(ii) the use of resources, including
3 existing energy infrastructure;
4 “(B) support domestic supply chains for
5 materials and components;
6 “(C) identify and incorporate nonhaz-
7 arduous alternative materials for components
8 and devices;
9 “(D) operate in partnership with tribal en-
10 ergy development organizations, Indian Tribes,
11 Tribal organizations, Native Hawaiian commu-
12 nity-based organizations, or territories or freely
13 associated States; or
14 “(E) are located in economically distressed
15 areas of the major shale natural gas-producing
16 regions of the United States.
17 “(3) EVALUATION.—Not later than 3 years
18 after the date of enactment of the Energy Infra-
19 structure Act, and not less frequently than once
20 every 4 years thereafter, the Secretary shall conduct,
21 and make available to the public and the relevant
22 committees of Congress, an independent review of
23 the progress of the projects carried out through
24 grants awarded, or contracts, cooperative agree-

1 ments, or other agreements entered into, under
2 paragraph (1).

3 “(b) CLEAN HYDROGEN TECHNOLOGY RECYCLING
4 RESEARCH, DEVELOPMENT, AND DEMONSTRATION PRO-
5 GRAM.—

6 “(1) IN GENERAL.—In carrying out the pro-
7 grams established under sections 805 and 813, the
8 Secretary shall award multiyear grants to, and enter
9 into contracts, cooperative agreements, or any other
10 agreements authorized under this Act or other Fed-
11 eral law with, eligible entities for research, develop-
12 ment, and demonstration projects to create innova-
13 tive and practical approaches to increase the reuse
14 and recycling of clean hydrogen technologies, includ-
15 ing by—

16 “(A) increasing the efficiency and cost-ef-
17 fectiveness of the recovery of raw materials
18 from clean hydrogen technology components
19 and systems, including enabling technologies
20 such as electrolyzers and fuel cells;

21 “(B) minimizing environmental impacts
22 from the recovery and disposal processes;

23 “(C) addressing any barriers to the re-
24 search, development, demonstration, and com-
25 mercialization of technologies and processes for

1 the disassembly and recycling of devices used
2 for clean hydrogen production, processing, de-
3 livery, storage, and use;

4 “(D) developing alternative materials, de-
5 signs, manufacturing processes, and other as-
6 pects of clean hydrogen technologies;

7 “(E) developing alternative disassembly
8 and resource recovery processes that enable effi-
9 cient, cost-effective, and environmentally re-
10 sponsible disassembly of, and resource recovery
11 from, clean hydrogen technologies; and

12 “(F) developing strategies to increase con-
13 sumer acceptance of, and participation in, the
14 recycling of fuel cells.

15 “(2) DISSEMINATION OF RESULTS.—The Sec-
16 retary shall make available to the public and the rel-
17 evant committees of Congress the results of the
18 projects carried out through grants awarded, or con-
19 tracts, cooperative agreements, or other agreements
20 entered into, under paragraph (1), including any
21 educational and outreach materials developed by the
22 projects.

23 “(c) APPROPRIATIONS.—In addition to amounts oth-
24 erwise made available, there is appropriated to the Sec-
25 retary to carry out this section, out of any amounts in

1 the Treasury not otherwise appropriated, \$100,000,000
2 for each of fiscal years 2022 through 2026.

3 **“SEC. 816. CLEAN HYDROGEN ELECTROLYSIS PROGRAM.**

4 “(a) DEFINITIONS.—In this section:

5 “(1) ELECTROLYSIS.—The term ‘electrolysis’
6 means a process that uses electricity to split water
7 into hydrogen and oxygen.

8 “(2) ELECTROLYZER.—The term ‘electrolyzer’
9 means a system that produces hydrogen using elec-
10 trolysis.

11 “(3) PROGRAM.—The term ‘program’ means
12 the program established under subsection (b).

13 “(b) ESTABLISHMENT.—Not later than 90 days after
14 the date of enactment of the Energy Infrastructure Act,
15 the Secretary shall establish a research, development,
16 demonstration, commercialization, and deployment pro-
17 gram for purposes of commercialization to improve the ef-
18 ficiency, increase the durability, and reduce the cost of
19 producing clean hydrogen using electrolyzers.

20 “(c) GOAL.—The goal of the program is to reduce
21 the cost of hydrogen produced using electrolyzers to less
22 than \$2 per kilogram of hydrogen by 2026.

23 “(d) DEMONSTRATION PROJECTS.—In carrying out
24 the program, the Secretary shall fund demonstration
25 projects—

1 “(1) to demonstrate technologies that produce
2 clean hydrogen using electrolyzers; and

3 “(2) to validate information on the cost, effi-
4 ciency, durability, and feasibility of commercial de-
5 ployment of the technologies described in paragraph
6 (1).

7 “(e) FOCUS.—The program shall focus on research
8 relating to, and the development, demonstration, and de-
9 ployment of—

10 “(1) low-temperature electrolyzers, including
11 liquid-alkaline electrolyzers, membrane-based
12 electrolyzers, and other advanced electrolyzers, capa-
13 ble of converting intermittent sources of electric
14 power to clean hydrogen with enhanced efficiency
15 and durability;

16 “(2) high-temperature electrolyzers that com-
17 bine electricity and heat to improve the efficiency of
18 clean hydrogen production;

19 “(3) advanced reversible fuel cells that combine
20 the functionality of an electrolyzer and a fuel cell;

21 “(4) new highly active, selective, and durable
22 electrolyzer catalysts and electro-catalysts that—

23 “(A) greatly reduce or eliminate the need
24 for platinum group metals; and

1 “(B) enable electrolysis of complex mix-
2 tures with impurities, including seawater;

3 “(5) modular electrolyzers for distributed en-
4 ergy systems and the bulk-power system (as defined
5 in section 215(a) of the Federal Power Act (16
6 U.S.C. 824o(a)));

7 “(6) low-cost membranes or electrolytes and
8 separation materials that are durable in the presence
9 of impurities or seawater;

10 “(7) improved component design and material
11 integration, including with respect to electrodes, po-
12 rous transport layers and bipolar plates, and bal-
13 ance-of-system components, to allow for scale-up and
14 domestic manufacturing of electrolyzers at a high
15 volume;

16 “(8) clean hydrogen storage technologies;

17 “(9) technologies that integrate hydrogen pro-
18 duction with—

19 “(A) clean hydrogen compression and dry-
20 ing technologies;

21 “(B) clean hydrogen storage; and

22 “(C) transportation or stationary systems;

23 and

24 “(10) integrated systems that combine hydro-
25 gen production with renewable power generation

1 technologies, including hybrid systems with hydrogen
2 storage.

3 “(f) GRANTS, CONTRACTS, COOPERATIVE AGREE-
4 MENTS.—

5 “(1) GRANTS.—In carrying out the program,
6 the Secretary shall award grants, on a competitive
7 basis, to eligible entities for projects that the Sec-
8 retary determines would provide the greatest
9 progress toward achieving the goal of the program
10 described in subsection (c).

11 “(2) CONTRACTS AND COOPERATIVE AGREE-
12 MENTS.—In carrying out the program, the Secretary
13 may enter into contracts and cooperative agreements
14 with eligible entities and Federal agencies for
15 projects that the Secretary determines would further
16 the purpose of the program described in subsection
17 (b).

18 “(3) ELIGIBILITY; APPLICATIONS.—

19 “(A) IN GENERAL.—The eligibility of an
20 entity to receive a grant under paragraph (1),
21 to enter into a contract or cooperative agree-
22 ment under paragraph (2), or to receive fund-
23 ing for a demonstration project under sub-
24 section (d) shall be determined by the Sec-
25 retary.

1 “(B) institutions of higher education;

2 “(C) research institutes;

3 “(D) industrial researchers; and

4 “(E) international researchers; and

5 “(2) act as a clearinghouse to collect informa-
6 tion from, and distribute information to, the Na-
7 tional Laboratories and other entities described in
8 subparagraphs (B) through (E) of paragraph (1).”.

9 **SEC. 3105. CLEAN HYDROGEN PRODUCTION QUALIFICA-**
10 **TIONS.**

11 (a) IN GENERAL.—The Energy Policy Act of 2005
12 (42 U.S.C. 16151 et seq.) (as amended by section
13 3104(1)) is amended by adding at the end the following:

14 **“SEC. 822. CLEAN HYDROGEN PRODUCTION QUALIFICA-**
15 **TIONS.**

16 “(a) IN GENERAL.—The Secretary, in consultation
17 with the Administrator of the Environmental Protection
18 Agency, shall develop a greenhouse gas emissions standard
19 for clean hydrogen production that shall apply to activities
20 carried out under this title.

21 “(b) APPLICATION.—The standard developed under
22 subsection (a) shall apply to clean hydrogen production
23 from renewable, fossil, nuclear, and other fuel sources
24 using any applicable production technology.”.

1 (b) CONFORMING AMENDMENT.—The table of con-
2 tents for the Energy Policy Act of 2005 (Public Law 109–
3 58; 119 Stat. 599) is amended by striking the items relat-
4 ing to sections 813 through 816 and inserting the fol-
5 lowing:

“Sec. 813. Regional clean hydrogen hubs.

“Sec. 814. National clean hydrogen strategy and roadmap.

“Sec. 815. Clean hydrogen manufacturing and recycling.

“Sec. 816. Clean hydrogen electrolysis program.

“Sec. 817. Laboratory management.

“Sec. 818. Technology transfer

“Sec. 819. Miscellaneous provisions.

“Sec. 820. Cost sharing.

“Sec. 821. Savings clause.

“Sec. 822. Clean hydrogen production qualifications.”.

6 **Subtitle C—Nuclear Energy**
7 **Infrastructure**

8 **SEC. 3201. INFRASTRUCTURE PLANNING FOR MICRO NU-**
9 **CLEAR REACTORS.**

10 (a) DEFINITION OF MICRO NUCLEAR REACTOR.—In
11 this section, the term “micro nuclear reactor” means a
12 nuclear reactor that has a power production capacity that
13 is not greater than 50 megawatts.

14 (b) REPORT.—Not later than 180 days after the date
15 of enactment of this Act, the Secretary shall submit to
16 the Committee on Energy and Natural Resources of the
17 Senate and the Committees on Energy and Commerce and
18 Science, Space, and Technology of the House of Rep-
19 resentatives a report on the plans of the Department to

1 enhance energy resilience with the use of micro nuclear
2 reactors.

3 (c) ELEMENTS.—The report required by subsection
4 (b) shall address the following:

5 (1) An evaluation by the Department of current
6 resilience and carbon reduction requirements for en-
7 ergy for facilities of the Department to determine
8 whether changes are needed to address—

9 (A) the causes of, and contributing factors
10 for, the February 2021 Electric Reliability
11 Council of Texas power outages;

12 (B) the need to provide uninterrupted
13 power to facilities of the Department for at
14 least 3 days during power grid failures;

15 (C) the need for protection against cyber
16 threats and electromagnetic pulses; and

17 (D) resilience to extreme natural events,
18 including earthquakes, volcanic activity, tor-
19 nados, hurricanes, floods, tsunamis, seiches, a
20 large quantity of snowfall, and very low or high
21 temperatures.

22 (2) A strategy of the Department for using nu-
23 clear energy to meet resilience and carbon reduction
24 goals of facilities of the Department.

1 (3) A strategy to partner with private industry
2 to develop and deploy micro nuclear reactors to re-
3 mote communities in order to replace diesel genera-
4 tion and other fossil fuels.

5 (4) An assessment by the Department of the
6 value associated with enhancing the resilience of a
7 facility of the Department by transitioning to power
8 from micro nuclear reactors and to co-located nu-
9 clear facilities with the capability to provide dedi-
10 cated power to the facility of the Department during
11 a grid outage or failure.

12 (5) The plans of the Department—

13 (A) for deploying a micro nuclear reactor
14 at a facility of the Department in the United
15 States by 2026; and

16 (B) to include micro nuclear reactors in
17 the planning for meeting future facility energy
18 needs.

19 **SEC. 3202. PROPERTY INTERESTS RELATING TO CERTAIN**
20 **PROJECTS AND PROTECTION OF INFORMA-**
21 **TION RELATING TO CERTAIN AGREEMENTS.**

22 (a) PROPERTY INTERESTS RELATING TO FEDER-
23 ALLY FUNDED ADVANCED NUCLEAR REACTOR
24 PROJECTS.—

25 (1) DEFINITIONS.—In this section:

1 (A) ADVANCED NUCLEAR REACTOR.—The
2 term “advanced nuclear reactor” has the mean-
3 ing given the term in section 951(b) of the En-
4 ergy Policy Act of 2005 (42 U.S.C. 16271(b)).

5 (B) PROPERTY INTEREST.—

6 (i) IN GENERAL.—Except as provided
7 in clause (ii), the term “property interest”
8 means any interest in real property or per-
9 sonal property (as those terms are defined
10 in section 200.1 of title 2, Code of Federal
11 Regulations (as in effect on the date of en-
12 actment of this Act)).

13 (ii) EXCLUSION.—The term “property
14 interest” does not include any interest in
15 intellectual property developed using fund-
16 ing provided under a project described in
17 paragraph (3).

18 (2) ASSIGNMENT OF PROPERTY INTERESTS.—
19 The Secretary may assign to any entity, including
20 the United States, fee title or any other property in-
21 terest acquired by the Secretary under an agreement
22 entered into with respect to a project described in
23 paragraph (3).

24 (3) PROJECT DESCRIBED.—A project referred
25 to in paragraph (2) is—

1 (A) a project for which funding is provided
2 pursuant to the funding opportunity announce-
3 ment of the Department numbered DE-FOA-
4 0002271, including any project for which fund-
5 ing has been provided pursuant to that an-
6 nouncement as of the date of enactment of this
7 Act;

8 (B) any other project for which funding is
9 provided using amounts made available for the
10 Advanced Reactor Demonstration Program of
11 the Department under the heading “Nuclear
12 Energy” under the heading “ENERGY PRO-
13 GRAMS” in title III of division C of the Fur-
14 ther Consolidated Appropriations Act, 2020
15 (Public Law 116-94; 133 Stat. 2670);

16 (C) any other project for which Federal
17 funding is provided under the Advanced Reac-
18 tor Demonstration Program of the Department;
19 or

20 (D) a project—

21 (i) relating to advanced nuclear reac-
22 tors; and

23 (ii) for which Federal funding is pro-
24 vided under a program that is similar to,
25 or a successor of, the Advanced Reactor

1 nation, including nuclear technology,
2 could reasonably require an extended
3 period of that protection to reach
4 commercialization.”.

5 (2) APPLICABILITY.—

6 (A) DEFINITION.—In this subsection, the
7 term “cooperative research and development
8 agreement” has the meaning given the term in
9 section 12(d) of the Stevenson-Wydler Tech-
10 nology Innovation Act of 1980 (15 U.S.C.
11 3710a(d)).

12 (B) RETROACTIVE EFFECT.—Clause (ii) of
13 section 12(c)(7)(B) of the Stevenson-Wydler
14 Technology Innovation Act of 1980 (15 U.S.C.
15 3710a(c)(7)(B)), as added by subsection (a) of
16 this section, shall apply with respect to any co-
17 operative research and development agreement
18 that is in effect as of the day before the date
19 of enactment of this Act.

20 (c) DEPARTMENT OF ENERGY CONTRACTS.—Section
21 646(g)(5) of the Department of Energy Organization Act
22 (42 U.S.C. 7256(g)(5)) is amended—

23 (1) by striking “(5) The Secretary” and insert-
24 ing the following:

25 “(5) PROTECTION FROM DISCLOSURE.—

1 “(A) IN GENERAL.—The Secretary”; and
2 (2) in subparagraph (A) (as so designated)—
3 (A) by striking “, for up to 5 years after
4 the date on which the information is devel-
5 oped,”; and
6 (B) by striking “agency.” and inserting
7 the following: “agency—
8 “(i) for up to 5 years after the date
9 on which the information is developed; or
10 “(ii) for up to 30 years after the date
11 on which the information is developed, if
12 the Secretary determines that the nature
13 of the technology under the transaction, in-
14 cluding nuclear technology, could reason-
15 ably require an extended period of protec-
16 tion from disclosure to reach commer-
17 cialization.
18 “(B) EXTENSION DURING TERM.—The
19 Secretary may extend the period of protection
20 from disclosure during the term of any trans-
21 action described in subparagraph (A) in accord-
22 ance with that subparagraph.”.

23 **SEC. 3203. CIVIL NUCLEAR CREDIT PROGRAM.**

24 (a) DEFINITIONS.—In this section:

1 (1) CERTIFIED NUCLEAR REACTOR.—The term
2 “certified nuclear reactor” means a nuclear reactor
3 that—

4 (A) competes in a competitive electricity
5 market; and

6 (B) is certified under subsection
7 (c)(2)(A)(i) to submit a sealed bid in accord-
8 ance with subsection (d).

9 (2) CREDIT.—The term “credit” means a credit
10 allocated to a certified nuclear reactor under sub-
11 section (e)(2).

12 (b) ESTABLISHMENT OF PROGRAM.—The Secretary
13 shall establish a civil nuclear credit program—

14 (1) to evaluate nuclear reactors that are pro-
15 jected to cease operations due to economic factors;
16 and

17 (2) to allocate credits to certified nuclear reac-
18 tors that are selected under paragraph (1)(B) of
19 subsection (e) to receive credits under paragraph (2)
20 of that subsection.

21 (c) CERTIFICATION.—

22 (1) APPLICATION.—

23 (A) IN GENERAL.—In order to be certified
24 under paragraph (2)(A)(i), the owner or oper-
25 ator of a nuclear reactor that is projected to

1 cease operations due to economic factors shall
2 submit to the Secretary an application at such
3 time, in such manner, and containing such in-
4 formation as the Secretary determines to be ap-
5 propriate, including—

6 (i) information on the operating costs
7 necessary to make the determination de-
8 scribed in paragraph (2)(A)(ii)(I), includ-
9 ing—

10 (I) the average projected annual
11 operating loss in dollars per mega-
12 watt-hour expected to be incurred by
13 the nuclear reactor over the 4-year pe-
14 riod for which credits would be allo-
15 cated;

16 (II) any private or publicly avail-
17 able data with respect to current or
18 projected bulk power market prices;

19 (III) out-of-market revenue
20 streams;

21 (IV) operations and maintenance
22 costs;

23 (V) capital costs, including fuel;
24 and

1 (VI) operational and market
2 risks;

3 (ii) an estimate of the potential incre-
4 mental air pollutants that would result if
5 the nuclear reactor were to cease oper-
6 ations;

7 (iii) known information on the source
8 of produced uranium and the location
9 where the uranium is converted, enriched,
10 and fabricated into fuel assemblies for the
11 nuclear reactor for the 4-year period for
12 which credits would be allocated; and

13 (iv) a detailed plan to sustain oper-
14 ations at the conclusion of the applicable
15 4-year period for which credits would be
16 allocated—

17 (I) without receiving additional
18 credits; or

19 (II) with the receipt of additional
20 credits of a lower amount than the
21 credits allocated during that 4-year
22 credit period.

23 (B) TIMELINE.—The Secretary shall ac-
24 cept applications described in subparagraph

25 (A)—

1 (i) until the date that is 120 days
2 after the date of enactment of this Act;
3 and

4 (ii) not less frequently than every year
5 thereafter.

6 (2) DETERMINATION TO CERTIFY.—

7 (A) DETERMINATION.—

8 (i) IN GENERAL.—Not later than 60
9 days after the applicable date under sub-
10 paragraph (B) of paragraph (1), the Sec-
11 retary shall determine whether to certify,
12 in accordance with clauses (ii) and (iii),
13 each nuclear reactor for which an applica-
14 tion is submitted under subparagraph (A)
15 of that paragraph.

16 (ii) MINIMUM REQUIREMENTS.—To
17 the maximum extent practicable, the Sec-
18 retary shall only certify a nuclear reactor
19 under clause (i) if—

20 (I) after considering the informa-
21 tion submitted under paragraph
22 (1)(A)(i), the Secretary determines
23 that the nuclear reactor is projected
24 to cease operations due to economic
25 factors; and

1 (II) after considering the esti-
2 mate submitted under paragraph
3 (1)(A)(ii), the Secretary determines
4 that pollutants would increase if the
5 nuclear reactor were to cease oper-
6 ations and be replaced with other
7 types of power generation.

8 (iii) PRIORITY.—In determining
9 whether to certify a nuclear reactor under
10 clause (i), the Secretary shall give priority
11 to a nuclear reactor that uses uranium
12 that is produced, converted, enriched, and
13 fabricated into fuel assemblies in the
14 United States.

15 (B) NOTICE.—For each application re-
16 ceived under paragraph (1)(A), the Secretary
17 shall provide to the applicable owner or oper-
18 ator, as applicable—

19 (i) a notice of the certification of the
20 applicable nuclear reactor; or

21 (ii) a notice that describes the reasons
22 why the certification of the applicable nu-
23 clear reactor was denied.

24 (d) BIDDING PROCESS.—

1 (1) IN GENERAL.—Subject to paragraph (2),
2 the Secretary shall establish a deadline by which
3 each certified nuclear reactor shall submit to the
4 Secretary a sealed bid that—

5 (A) describes the price per megawatt-hour
6 required to maintain operations of the certified
7 nuclear reactor during the 4-year period for
8 which the certified nuclear reactor would receive
9 credits; and

10 (B) includes a commitment, subject to the
11 receipt of credits, to provide a specific number
12 of megawatt-hours of generation during the 4-
13 year period for which credits would be allocated.

14 (2) REQUIREMENT.—The deadline established
15 under paragraph (1) shall be not later than 30 days
16 after the first date on which the Secretary has made
17 the determination described in paragraph (2)(A)(i)
18 of subsection (c) with respect to each application
19 submitted under paragraph (1)(A) of that sub-
20 section.

21 (e) ALLOCATION.—

22 (1) AUCTION.—Notwithstanding section 169 of
23 the Atomic Energy Act of 1954 (42 U.S.C. 2209),
24 the Secretary shall—

1 (A) in consultation with the heads of appli-
2 cable Federal agencies, establish a process for
3 evaluating bids submitted under subsection
4 (d)(1) through an auction process; and

5 (B) select certified nuclear reactors to be
6 allocated credits.

7 (2) CREDITS.—Subject to subsection (f)(2), on
8 selection under paragraph (1), a certified nuclear re-
9 actor shall be allocated credits for a 4-year period
10 beginning on the date of the selection.

11 (3) REQUIREMENT.—To the maximum extent
12 practicable, the Secretary shall use the amounts
13 made available for credits under this section to allo-
14 cate credits to as many certified nuclear reactors as
15 possible.

16 (f) RENEWAL.—

17 (1) IN GENERAL.—The owner or operator of a
18 certified nuclear reactor may seek to recertify the
19 nuclear reactor in accordance with this section.

20 (2) LIMITATION.—Notwithstanding any other
21 provision of this section, the Secretary may not allo-
22 cate any credits after September 30, 2031.

23 (g) ADDITIONAL REQUIREMENTS.—

24 (1) AUDIT.—During the 4-year period begin-
25 ning on the date on which a certified nuclear reactor

1 first receives a credit, the Secretary shall periodically
2 audit the certified nuclear reactor.

3 (2) RECAPTURE.—The Secretary shall, by regu-
4 lation, provide for the recapture of the allocation of
5 any credit to a certified nuclear reactor that, during
6 the period described in paragraph (1)—

7 (A) terminates operations; or

8 (B) does not operate at an annual loss in
9 the absence of an allocation of credits to the
10 certified nuclear reactor.

11 (3) CONFIDENTIALITY.—The Secretary shall es-
12 tablish procedures to ensure that any confidential,
13 private, proprietary, or privileged information that is
14 included in a sealed bid submitted under this section
15 is not publicly disclosed or otherwise improperly
16 used.

17 (h) REPORT.—Not later than January 1, 2024, the
18 Comptroller General of the United States shall submit to
19 Congress a report with respect to the credits allocated to
20 certified nuclear reactors, which shall include—

21 (1) an evaluation of the effectiveness of the
22 credits in avoiding air pollutants while ensuring grid
23 reliability;

24 (2) a quantification of the ratepayer savings
25 achieved under this section; and

1 (3) any recommendations to renew or expand
2 the credits.

3 (i) APPROPRIATIONS.—In addition to amounts other-
4 wise made available, there is appropriated to the Secretary
5 to carry out this section, out of any amounts in the Treas-
6 ury not otherwise appropriated, \$1,200,000,000 for each
7 of fiscal years 2022 through 2026.

8 **Subtitle D—Miscellaneous**

9 **SEC. 3301. SOLAR ENERGY TECHNOLOGIES ON CURRENT** 10 **AND FORMER MINE LAND.**

11 Section 3004 of the Energy Act of 2020 (42 U.S.C.
12 16238) is amended—

13 (1) in subsection (a)—

14 (A) by redesignating paragraphs (6)
15 through (15) as paragraphs (7) through (16),
16 respectively; and

17 (B) by inserting after paragraph (5) the
18 following:

19 “(6) MINE LAND.—The term ‘mine land’ means
20 land subject to title V of the Surface Mining Control
21 and Reclamation Act of 1977 (30 U.S.C. 1251 et
22 seq.).”;

23 (2) in subsection (b)(6)(B)—

24 (A) in the matter preceding clause (i), by
25 inserting “, in consultation with the Secretary

1 of the Interior and the Administrator of the
2 Environmental Protection Agency for purposes
3 of clause (iv),” after “the Secretary”;

4 (B) in clause (iii), by striking “and” after
5 the semicolon;

6 (C) by redesignating clause (iv) as clause
7 (v); and

8 (D) by inserting after clause (iii) the fol-
9 lowing:

10 “(iv) a description of the technical
11 and economic viability of siting solar en-
12 ergy technologies on current and former
13 mine land, including necessary interconnec-
14 tion and transmission siting; and”.

15 **SEC. 3302. CLEAN ENERGY DEMONSTRATION PROGRAM ON**
16 **CURRENT AND FORMER MINE LAND.**

17 (a) DEFINITIONS.—In this section:

18 (1) CLEAN ENERGY PROJECT.—The term
19 “clean energy project” means a project that dem-
20 onstrates 1 or more of the following technologies:

21 (A) Solar.

22 (B) Micro-grids.

23 (C) Geothermal.

24 (D) Direct air capture.

1 (E) Fossil-fueled electricity generation with
2 carbon capture, utilization, and sequestration.

3 (F) Energy storage, including pumped
4 storage hydropower and compressed air storage.

5 (G) Advanced nuclear technologies.

6 (2) ECONOMICALLY DISTRESSED AREA.—The
7 term “economically distressed area” means an area
8 described in section 301(a) of the Public Works and
9 Economic Development Act of 1965 (42 U.S.C.
10 3161(a)).

11 (3) MINE LAND.—The term “mine land” means
12 land subject to title V of the Surface Mining Control
13 and Reclamation Act of 1977 (30 U.S.C. 1251 et
14 seq.).

15 (4) PROGRAM.—The term “program” means
16 the demonstration program established under sub-
17 section (b).

18 (b) ESTABLISHMENT.—The Secretary shall establish
19 a program to demonstrate the technical and economic via-
20 bility of carrying out clean energy projects on current and
21 former mine land.

22 (c) SELECTION OF DEMONSTRATION PROJECTS.—

23 (1) IN GENERAL.—In carrying out the program,
24 the Secretary shall select not more than 3 clean en-

1 energy projects, to be carried out in geographically di-
2 verse regions.

3 (2) ELIGIBILITY.—To be eligible to be selected
4 for participation in the program under paragraph
5 (1), a clean energy project shall demonstrate, as de-
6 termined by the Secretary, a technology on a current
7 or former mine land site with a reasonable expecta-
8 tion of commercial viability.

9 (3) PRIORITY.—In selecting clean energy
10 projects for participation in the program under
11 paragraph (1), the Secretary shall prioritize clean
12 energy projects that will—

13 (A) be carried out in a location where the
14 greatest number of jobs can be created from the
15 successful demonstration of the clean energy
16 project;

17 (B) provide the greatest net impact in
18 avoiding or reducing anthropogenic emissions of
19 greenhouse gases;

20 (C) provide the greatest domestic job cre-
21 ation (both directly and indirectly) during the
22 implementation of the clean energy project;

23 (D) provide the greatest job creation and
24 economic development in the vicinity of the
25 clean energy project, particularly—

1 (i) in economically distressed areas;

2 and

3 (ii) with respect to dislocated workers

4 who were previously employed in manufac-

5 turing, coal power plants, or coal mining;

6 (E) have the greatest potential for techno-

7 logical innovation and commercial deployment;

8 (F) have the lowest levelized cost of gen-

9 erated or stored energy;

10 (G) have the lowest rate of greenhouse gas

11 emissions per unit of electricity generated or

12 stored; and

13 (H) have the shortest project time from

14 permitting to completion.

15 (4) PROJECT SELECTION.—The Secretary shall

16 solicit proposals for clean energy projects and select

17 clean energy project finalists in consultation with the

18 Secretary of the Interior, the Administrator of the

19 Environmental Protection Agency, and the Secretary

20 of Labor.

21 (d) CONSULTATION.—The Secretary shall consult

22 with the Director of the Office of Surface Mining Rec-

23 lamation and Enforcement and the Administrator of the

24 Environmental Protection Agency, acting through the Of-

25 fice of Brownfields and Land Revitalization, to determine

1 whether it is necessary to promulgate regulations or issue
2 guidance in order to prioritize and expedite the siting of
3 clean energy projects on current and former mine land
4 sites.

5 (e) TECHNICAL ASSISTANCE.—The Secretary shall
6 provide technical assistance to project applicants selected
7 for participation in the program under subsection (c) to
8 assess the needed interconnection, transmission, and other
9 grid components and permitting and siting necessary to
10 interconnect, on current and former mine land where the
11 project will be sited, any generation or storage with the
12 electric grid.

13 (f) APPROPRIATIONS.—In addition to amounts other-
14 wise made available, there is appropriated to the Secretary
15 to carry out this section, out of any amounts in the Treas-
16 ury not otherwise appropriated, \$100,000,000 for each of
17 fiscal years 2022 through 2026.

18 **SEC. 3303. STUDY AND REPORT ON HYPERLOOP TECH-**
19 **NOLOGIES.**

20 (a) IN GENERAL.—Not later than 1 year after the
21 date of enactment of this Act, the Secretary shall conduct,
22 and submit to Congress a report describing the results of,
23 a study on the opportunities for, and barriers to, deploying
24 hyperloop technologies in the United States.

1 (b) INCLUSIONS.—The report submitted under sub-
2 section (a) shall include—

3 (1) a description of any current research and
4 development activities carried out by the Depart-
5 ment with respect to hyperloop technologies;

6 (2) recommendations for future research, devel-
7 opment, and demonstration and funding needs to
8 support the utilization and scale-up of hyperloop
9 technologies;

10 (3) identifications of sites that would be suit-
11 able for research, development, and demonstration
12 projects relating to hyperloop technologies; and

13 (4) a description of the potential for job cre-
14 ation and workforce needs if hyperloop technologies
15 were deployed.

16 **SEC. 3304. HYDROPOWER.**

17 In addition to amounts otherwise made available,
18 there is appropriated to the Secretary to carry out activi-
19 ties under sections 242 and 243 of the Energy Policy Act
20 of 2005 (42 U.S.C. 15881, 15882), out of any amounts
21 in the Treasury not otherwise appropriated,
22 \$2,253,600,000 for the period of fiscal years 2022
23 through 2026.

1 **TITLE IV—ENABLING ENERGY**
2 **INFRASTRUCTURE INVEST-**
3 **MENT AND DATA COLLEC-**
4 **TION**

5 **Subtitle A—Department of Energy**
6 **Loan Program**

7 **SEC. 4001. DEPARTMENT OF ENERGY LOAN PROGRAMS.**

8 (a) TITLE XVII INNOVATIVE ENERGY LOAN GUAR-
9 ANTEE PROGRAM.—

10 (1) REASONABLE PROSPECT OF REPAYMENT.—

11 Section 1702(d)(1) of the Energy Policy Act of 2005
12 (42 U.S.C. 16512(d)(1)) is amended—

13 (A) by striking the paragraph designation
14 and heading and all that follows through “No
15 guarantee” and inserting the following:

16 “(1) REQUIREMENT.—

17 “(A) IN GENERAL.—No guarantee”; and

18 (B) by adding at the end the following:

19 “(B) REASONABLE PROSPECT OF REPAY-
20 MENT.—The Secretary shall base a determina-
21 tion of whether there is reasonable prospect of
22 repayment under subparagraph (A) on a com-
23 prehensive evaluation of whether the borrower
24 has a reasonable prospect of repaying the guar-

1 anteed obligation for the eligible project, includ-
2 ing an evaluation of—

3 “(i) the strength of the contractual
4 terms of the eligible project (if commer-
5 cially reasonably available);

6 “(ii) the forecast of noncontractual
7 cash flows supported by market projections
8 from reputable sources, as determined by
9 the Secretary;

10 “(iii) cash sweeps and other structure
11 enhancements;

12 “(iv) the projected financial strength
13 of the borrower—

14 “(I) at the time of loan close;
15 and

16 “(II) throughout the loan term
17 after the project is completed;

18 “(v) the financial strength of the in-
19 vestors and strategic partners of the bor-
20 rower, if applicable; and

21 “(vi) other financial metrics and anal-
22 yses that are relied on by the private lend-
23 ing community and nationally recognized
24 credit rating agencies, as determined ap-
25 propriate by the Secretary.”.

1 (2) LOAN GUARANTEES FOR PROJECTS THAT
2 INCREASE THE DOMESTIC SUPPLY OF CRITICAL MIN-
3 ERALS.—Section 1703(b) of the Energy Policy Act
4 of 2005 (42 U.S.C. 16513(b)) is amended by adding
5 at the end the following:

6 “(13) Projects that increase the domestic sup-
7 ply of critical minerals (as defined in section
8 7002(a) of the Energy Act of 2020 (30 U.S.C.
9 1606(a)), including through the production, proc-
10 essing, manufacturing, recycling, or fabrication of
11 mineral alternatives.”.

12 (b) ADVANCED TECHNOLOGY VEHICLE MANUFAC-
13 TURING.—

14 (1) ELIGIBILITY.—Section 136(a)(1) of the En-
15 ergy Independence and Security Act of 2007 (42
16 U.S.C. 17013(a)(1)) is amended—

17 (A) in subparagraph (C), by striking the
18 period at the end and inserting a semicolon;

19 (B) by redesignating subparagraphs (A)
20 through (C) as clauses (i) through (iii), respec-
21 tively, and indenting appropriately;

22 (C) in the matter preceding clause (i) (as
23 so redesignated), by striking “means an ultra”
24 and inserting the following: “means—

25 “(A) an ultra”; and

1 (D) by adding at the end the following:

2 “(B) a medium duty vehicle or a heavy
3 duty vehicle that exceeds 125 percent of the
4 greenhouse gas emissions and fuel efficiency
5 standards established by the final rule of the
6 Environmental Protection Agency entitled
7 ‘Greenhouse Gas Emissions and Fuel Efficiency
8 Standards for Medium- and Heavy-Duty En-
9 gines and Vehicles—Phase 2’ (81 Fed. Reg.
10 73478 (October 25, 2016));

11 “(C) a train or locomotive;

12 “(D) marine transportation; and

13 “(E) hyperloop technology.”.

14 (2) REASONABLE PROSPECT OF REPAYMENT.—
15 Section 136(d) of the Energy Independence and Se-
16 curity Act of 2007 (42 U.S.C. 17013(d)) is amend-
17 ed—

18 (A) by striking paragraph (3) and insert-
19 ing the following:

20 “(3) SELECTION OF ELIGIBLE PROJECTS.—

21 “(A) IN GENERAL.—The Secretary shall
22 select eligible projects to receive loans under
23 this subsection if the Secretary determines
24 that—

25 “(i) the loan recipient—

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1 “(I) has a reasonable prospect of
2 repaying the principal and interest on
3 the loan;

4 “(II) will provide sufficient infor-
5 mation to the Secretary for the Sec-
6 retary to ensure that the qualified in-
7 vestment is expended efficiently and
8 effectively; and

9 “(III) has met such other criteria
10 as may be established and published
11 by the Secretary; and

12 “(ii) the amount of the loan (when
13 combined with amounts available to the
14 loan recipient from other sources) will be
15 sufficient to carry out the project.

16 “(B) REASONABLE PROSPECT OF REPAY-
17 MENT.—The Secretary shall base a determina-
18 tion of whether there is a reasonable prospect
19 of repayment of the principal and interest on a
20 loan under subparagraph (A)(i)(I) on a com-
21 prehensive evaluation of whether the loan re-
22 cipient has a reasonable prospect of repaying
23 the principal and interest, including an evalua-
24 tion of—

1 “(i) the strength of the contractual
2 terms of the eligible project (if commer-
3 cially reasonably available);

4 “(ii) the forecast of noncontractual
5 cash flows supported by market projections
6 from reputable sources, as determined by
7 the Secretary;

8 “(iii) cash sweeps and other structure
9 enhancements;

10 “(iv) the projected financial strength
11 of the loan recipient—

12 “(I) at the time of loan close;

13 and

14 “(II) throughout the loan term
15 after the project is completed;

16 “(v) the financial strength of the in-
17 vestors and strategic partners of the loan
18 recipient, if applicable; and

19 “(vi) other financial metrics and anal-
20 yses that are relied on by the private lend-
21 ing community and nationally recognized
22 credit rating agencies, as determined ap-
23 propriate by the Secretary.”; and

24 (B) in paragraph (4)—

1 (i) in subparagraph (C), by striking
2 “and” after the semicolon;

3 (ii) in subparagraph (D), by striking
4 the period at the end and inserting “;
5 and”; and

6 (iii) by adding at the end the fol-
7 lowing:

8 “(E) shall be subject to the condition that
9 the loan is not subordinate to other financing.”.

10 (3) ADDITIONAL REFORMS.—Section 136 of the
11 Energy Independence and Security Act of 2007 (42
12 U.S.C. 17013) is amended—

13 (A) in subsection (h)—

14 (i) in the subsection heading, by strik-
15 ing “AUTOMOBILE” and inserting “AD-
16 VANCED TECHNOLOGY VEHICLE”; and

17 (ii) in paragraph (1)(B), by striking
18 “automobiles, or components of auto-
19 mobiles” and inserting “advanced tech-
20 nology vehicles, or components of advanced
21 technology vehicles”;

22 (B) by striking subsection (i);

23 (C) by redesignating subsection (j) as sub-
24 section (i); and

25 (D) by adding at the end the following:

1 “(j) COORDINATION.—In carrying out this section,
2 the Secretary shall coordinate with relevant vehicle, bio-
3 energy, and hydrogen and fuel cell demonstration project
4 activities supported by the Department.

5 “(k) OUTREACH.—In carrying out this section, the
6 Secretary shall—

7 “(1) provide assistance with the completion of
8 applications for awards or loans under this section;
9 and

10 “(2) conduct outreach, including through con-
11 ferences and online programs, to disseminate infor-
12 mation on awards and loans under this section to
13 potential applicants.

14 “(l) REPORT.—Not later than 2 years after the date
15 of enactment of this subsection, and every 3 years there-
16 after, the Secretary shall submit to Congress a report on
17 the status of projects supported by a loan under this sec-
18 tion, including—

19 “(1) a list of projects receiving a loan under
20 this section, including the loan amount and con-
21 struction status of each project;

22 “(2) the status of the loan repayment for each
23 project, including future repayment projections;

1 “(3) data regarding the number of direct and
2 indirect jobs retained, restored, or created by fi-
3 nanced projects;

4 “(4) the number of new projects projected to
5 receive a loan under this section in the next 2 years,
6 including the projected aggregate loan amount over
7 the next 2 years;

8 “(5) evaluation of ongoing compliance with the
9 assurances and commitments, and of the predictions,
10 made by applicants pursuant to paragraphs (2) and
11 (3) of subsection (d);

12 “(6) the total number of applications received
13 by the Department each year; and

14 “(7) any other metrics the Secretary determines
15 appropriate.”.

16 **Subtitle B—Energy Information** 17 **Administration**

18 **SEC. 4101. DEFINITIONS.**

19 In this subtitle:

20 (1) ADMINISTRATOR.—The term “Adminis-
21 trator” means the Administrator of the Energy In-
22 formation Administration.

23 (2) ANNUAL CRITICAL MINERALS OUTLOOK.—
24 The term “Annual Critical Minerals Outlook” means
25 the Annual Critical Minerals Outlook prepared

1 under section 7002(j)(1)(B) of the Energy Act of
2 2020 (30 U.S.C. 1606(j)(1)(B)).

3 (3) CRITICAL MINERAL.—The term “critical
4 mineral” has the meaning given the term in section
5 7002(a) of the Energy Act of 2020 (30 U.S.C.
6 1606(a)).

7 (4) HOUSEHOLD ENERGY BURDEN.—The term
8 “household energy burden” means the quotient ob-
9 tained by dividing—

10 (A) the residential energy expenditures (as
11 defined in section 440.3 of title 10, Code of
12 Federal Regulations (as in effect on the date of
13 enactment of this Act)) of the applicable house-
14 hold; by

15 (B) the annual income of that household.

16 (5) HOUSEHOLD WITH A HIGH ENERGY BUR-
17 DEN.—The term “household with a high energy bur-
18 den” has the meaning given the term in section
19 440.3 of title 10, Code of Federal Regulations (as
20 in effect on the date of enactment of this Act).

21 (6) LARGE MANUFACTURING FACILITY.—The
22 term “large manufacturing facility” means a manu-
23 facturing facility that—

24 (A) annually consumes more than 35,000
25 megawatt-hours of electricity; or

1 (B) has a peak power demand of more
2 than 10 megawatts.

3 (7) LOAD-SERVING ENTITY.—The term “load-
4 serving entity” has the meaning given the term in
5 section 217(a) of the Federal Power Act (16 U.S.C.
6 824q(a)).

7 (8) MISCELLANEOUS ELECTRIC LOAD.—The
8 term “miscellaneous electric load” means electricity
9 that—

10 (A) is used by an appliance or device—

11 (i) within a building; or

12 (ii) to serve a building; and

13 (B) is not used for heating, ventilation, air
14 conditioning, lighting, water heating, or refrig-
15 eration.

16 (9) REGIONAL TRANSMISSION ORGANIZATION.—
17 The term “Regional Transmission Organization”
18 has the meaning given the term in section 3 of the
19 Federal Power Act (16 U.S.C. 796).

20 (10) RURAL AREA.—The term “rural area”
21 means a city, town, or unincorporated area that has
22 a population of not more than 10,000 inhabitants.

23 **SEC. 4102. DATA COLLECTION IN THE ELECTRICITY SEC-**
24 **TOR.**

25 (a) DASHBOARD.—

1 (1) ESTABLISHMENT.—

2 (A) IN GENERAL.—Not later than 90 days
3 after the date of enactment of this Act, the Ad-
4 ministrator shall establish an online database to
5 track the operation of the bulk power system in
6 the contiguous 48 States (referred to in this
7 section as the “dashboard”).

8 (B) IMPROVEMENT OF EXISTING DASH-
9 BOARD.—The dashboard under subparagraph
10 (A) may be established through the improve-
11 ment, in accordance with this subsection, of an
12 existing dashboard of the Energy Information
13 Administration, such as—

14 (i) the U.S. Electric System Oper-
15 ating Data dashboard; or

16 (ii) the Hourly Electric Grid Monitor.

17 (2) EXPANSION.—

18 (A) IN GENERAL.—Not later than 1 year
19 after the date of enactment of this Act, the Ad-
20 ministrator shall expand the dashboard estab-
21 lished under paragraph (1) to include, to the
22 maximum extent practicable, hourly operating
23 data collected from the electricity balancing au-
24 thorities that operate the bulk power system in

1 all of the several States, each territory of the
2 United States, and the District of Columbia.

3 (B) TYPES OF DATA.—The hourly oper-
4 ating data collected under subparagraph (A)
5 may include data relating to—

6 (i) total electricity demand;

7 (ii) electricity demand by subregion;

8 (iii) short-term electricity demand
9 forecasts;

10 (iv) total electricity generation;

11 (v) net electricity generation by fuel
12 type, including renewables;

13 (vi) electricity stored and discharged;

14 (vii) total net electricity interchange;

15 (viii) electricity interchange with di-
16 rectly interconnected balancing authorities;

17 and

18 (ix) the estimated marginal green-
19 house gas emissions per megawatt hour of
20 electricity generated—

21 (I) within the metered boundaries
22 of each balancing authority; and

23 (II) for each pricing node.

24 (b) MIX OF ENERGY SOURCES.—

1 (1) IN GENERAL.—Not later than 1 year after
2 the date of enactment of this Act, the Administrator
3 shall establish, in accordance with section 4109 and
4 this subsection, a system to harmonize the operating
5 data on electricity generation collected under sub-
6 section (a) with—

7 (A) measurements of greenhouse gas and
8 other pollutant emissions collected by the Envi-
9 ronmental Protection Agency;

10 (B) other data collected by the Environ-
11 mental Protection Agency or other relevant
12 Federal agencies, as the Administrator deter-
13 mines to be appropriate; and

14 (C) data collected by State or regional en-
15 ergy credit registries.

16 (2) OUTCOMES.—The system established under
17 paragraph (1) shall result in an integrated dataset
18 that includes, for any given time—

19 (A) the net generation of electricity by
20 megawatt hour within the metered boundaries
21 of each balancing authority; and

22 (B) the average and marginal greenhouse
23 gas emissions by megawatt hour of electricity
24 generated within the metered boundaries of
25 each balancing authority.

1 (3) REAL-TIME DATA DISSEMINATION.—To the
2 maximum extent practicable, the system established
3 under paragraph (1) shall disseminate data on a
4 real-time basis.

5 (4) COMPLEMENTARY EFFORTS.—The system
6 established under paragraph (1) shall complement
7 any existing data dissemination efforts of the Ad-
8 ministrator that make use of electricity generation
9 data, such as electricity demand by subregion and
10 electricity interchange with directly interconnected
11 balancing authorities.

12 (c) OBSERVED CHARACTERISTICS OF BULK POWER
13 SYSTEM RESOURCE INTEGRATION.—

14 (1) IN GENERAL.—Not later than 1 year after
15 the date of enactment of this Act, the Administrator
16 shall establish a system to provide to the public
17 timely data on the integration of energy resources
18 into the bulk power system and the electric distribu-
19 tion grids in the United States, and the observed ef-
20 fects of that integration.

21 (2) REQUIREMENTS.—In carrying out para-
22 graph (1), the Administrator shall seek to improve
23 the temporal and spatial resolution of data relating
24 to how grid operations are changing, such as
25 through—

1 (A) thermal generator cycling to accommo-
2 date intermittent generation;

3 (B) generation unit self-scheduling prac-
4 tices;

5 (C) renewable source curtailment;

6 (D) utility-scale storage;

7 (E) load response;

8 (F) aggregations of distributed energy re-
9 sources at the distribution system level;

10 (G) power interchange between directly
11 connected balancing authorities;

12 (H) expanding Regional Transmission Or-
13 ganization balancing authorities;

14 (I) improvements in real-time—

15 (i) accuracy of locational marginal
16 prices; and

17 (ii) signals to flexible demand; and

18 (J) disruptions to grid operations, includ-
19 ing disruptions caused by cyber sources, phys-
20 ical sources, extreme weather events, or other
21 sources.

22 (d) DISTRIBUTION SYSTEM OPERATIONS.—

23 (1) IN GENERAL.—Not later than 1 year after
24 the date of enactment of this Act, the Administrator
25 shall establish a system to provide to the public

1 timely data on the operations of load-serving entities
2 in the electricity grids of the United States.

3 (2) REQUIREMENTS.—

4 (A) IN GENERAL.—In carrying out para-
5 graph (1), the Administrator shall—

6 (i) not less frequently than annually,
7 provide data on—

8 (I) the delivered generation re-
9 source mix for each load-serving enti-
10 ty; and

11 (II) the distributed energy re-
12 sources operating within each service
13 area of a load-serving entity;

14 (ii) harmonize the data on delivered
15 generation resource mix described in clause
16 (i)(I) with measurements of greenhouse
17 gas emissions collected by the Environ-
18 mental Protection Agency;

19 (iii) to the maximum extent prac-
20 ticable, disseminate the data described in
21 clause (i)(I) and the harmonized data de-
22 scribed in clause (ii) on a real-time basis;
23 and

24 (iv) provide historical data, beginning
25 with the earliest calendar year practicable,

1 but not later than calendar year 2020, on
2 the delivered generation resource mix de-
3 scribed in clause (i)(I).

4 (B) DATA ON THE DELIVERED GENERA-
5 TION RESOURCE MIX.—In collecting the data
6 described in subparagraph (A)(i)(I), the Admin-
7 istrator shall—

8 (i) use existing voluntary industry
9 methodologies, including reporting proto-
10 cols and databases that provide consistent,
11 timely, and accessible carbon emissions in-
12 tensity rates for delivered electricity;

13 (ii) consider that generation and
14 transmission entities may provide data on
15 behalf of load-serving entities;

16 (iii) to the extent that the Adminis-
17 trator determines necessary, require each
18 load-serving entity to submit additional in-
19 formation as needed to determine the deliv-
20 ered generation resource mix of the load-
21 serving entity, including financial or con-
22 tractual agreements for power and genera-
23 tion resource type attributes with respect
24 to power owned by or retired by the load-
25 serving entity; and

1 (iv) for any portion of the generation
2 resource mix of a load-serving entity that
3 is otherwise unaccounted for, develop a
4 methodology to assign to the load-serving
5 entity a share of the otherwise unac-
6 counted for resource mix of the relevant
7 balancing authority.

8 (3) CITY-LEVEL DATA.—Not later than 1 year
9 after the date of enactment of this Act, the Adminis-
10 trator shall develop a plan for the collection or esti-
11 mation of data on the electricity consumption within
12 the city limits of cities in the United States.

13 **SEC. 4103. EXPANSION OF ENERGY CONSUMPTION SUR-**
14 **VEYS.**

15 (a) IN GENERAL.—Not later than 2 years after the
16 date of enactment of this Act, the Administrator shall im-
17 plement measures to expand the Manufacturing Energy
18 Consumption Survey, the Commercial Building Energy
19 Consumption Survey, and the Residential Energy Con-
20 sumption Survey to include data on energy end use in
21 order to facilitate the identification of—

22 (1) opportunities to improve energy efficiency
23 and energy productivity;

24 (2) changing patterns of energy use; and

1 (3) opportunities to better understand and
2 manage miscellaneous electric loads.

3 (b) REQUIREMENTS.—

4 (1) IN GENERAL.—In carrying out subsection
5 (a), the Administrator shall—

6 (A) increase the scope and frequency of
7 data collection on energy end uses and services;

8 (B) use new data collection methods and
9 tools in order to obtain more comprehensive
10 data and reduce the burden on survey respond-
11 ents, including by—

12 (i) accessing other existing data
13 sources; and

14 (ii) if feasible, developing online and
15 real-time reporting systems;

16 (C) identify and report community-level
17 economic and environmental impacts, including
18 with respect to—

19 (i) the reliability and security of the
20 energy supply; and

21 (ii) local areas with households with a
22 high energy burden; and

23 (D) improve the presentation of data, in-
24 cluding by—

1 (i) enabling the presentation of data
2 in an interactive cartographic format on a
3 national, regional, State, and local level
4 with the functionality of viewing various
5 economic, energy, and demographic meas-
6 ures on an individual basis or in combina-
7 tion; and

8 (ii) incorporating the results of the
9 data collection, methods, and tools de-
10 scribed in subparagraphs (A) and (B) into
11 existing and new digital distribution meth-
12 ods.

13 (2) MANUFACTURING ENERGY CONSUMPTION
14 SURVEY.—With respect to the Manufacturing En-
15 ergy Consumption Survey, the Administrator shall—

16 (A) implement measures to provide more
17 detailed representations of data by region;

18 (B) for large manufacturing facilities,
19 break out process heat use by required process
20 temperatures in order to facilitate the identi-
21 fication of opportunities for cost reductions and
22 energy efficiency or energy productivity im-
23 provements;

24 (C) collect information on—

1 (i) energy source-switching capabili-
2 ties, especially with respect to thermal
3 processes and the efficiency of thermal
4 processes;

5 (ii) the use of electricity, biofuels, hy-
6 drogen, or other alternative fuels to
7 produce process heat; and

8 (iii) the use of demand response; and

9 (D) identify current and potential future
10 industrial clusters in which multiple firms and
11 facilities in a defined geographic area share the
12 costs and benefits of infrastructure for clean
13 manufacturing, such as—

14 (i) hydrogen generation, production,
15 transport, use, and storage infrastructure;
16 and

17 (ii) carbon dioxide capture, transport,
18 use, and storage infrastructure.

19 (3) RESIDENTIAL ENERGY CONSUMPTION SUR-
20 VEY.—With respect to the Residential Energy Con-
21 sumption Survey, the Administrator shall—

22 (A) implement measures to provide more
23 detailed representations of data by—

24 (i) geographic area, including by State
25 (for each State);

- 1 (ii) building type, including multi-fam-
2 ily buildings;
- 3 (iii) household income;
- 4 (iv) location in a rural area; and
- 5 (v) other demographic characteristics,
6 as determined by the Administrator; and
- 7 (B) report measures of—
- 8 (i) household electrical service capac-
9 ity;
- 10 (ii) access to utility demand-side man-
11 agement programs and bill credits;
- 12 (iii) the affordability of energy; and
- 13 (iv) the household energy burden for
14 households—
- 15 (I) in different geographic areas;
- 16 (II) by electricity, heating, and
17 other end-uses; and
- 18 (III) with different demographic
19 characteristics that correlate with in-
20 creased household energy burden, in-
21 cluding—
- 22 (aa) having a low household
23 income;
- 24 (bb) being a minority house-
25 hold;

- 1 (cc) residing in manufac-
2 tured or multifamily housing;
3 (dd) residing in rental hous-
4 ing; and
5 (ee) other factors, as deter-
6 mined by the Administrator.

7 **SEC. 4104. DATA COLLECTION ON ELECTRIC VEHICLE INTE-**
8 **GRATION WITH THE ELECTRICITY GRIDS.**

9 (a) IN GENERAL.—Not later than 1 year after the
10 date of enactment of this Act, the Administrator shall de-
11 velop and implement measures to expand data collection
12 with respect to bi-directional electric vehicle integration
13 with the electricity grids.

14 (b) SOURCES OF DATA.—The sources of the data col-
15 lected pursuant to subsection (a) may include—

16 (1) host-owned or charging-network-owned elec-
17 tric vehicle charging stations;

18 (2) aggregators of charging-network electricity
19 demand;

20 (3) electric utilities offering managed-charging
21 programs;

22 (4) electric utility coalitions;

23 (5) individual, corporate, or public owners of
24 electric vehicles; and

25 (6) balancing authority analyses of—

1 (A) transformer loading congestion; and

2 (B) distribution-system congestion.

3 (c) CONSULTATION AND COORDINATION.—In car-
4 rying out subsection (a), the Administrator may consult
5 and enter into agreements with other institutions having
6 relevant data and data collection capabilities, such as—

7 (1) the Secretary of Transportation;

8 (2) the Secretary;

9 (3) the Administrator of the Environmental
10 Protection Agency;

11 (4) States or State agencies; and

12 (5) private entities.

13 **SEC. 4105. PLAN FOR THE FORECASTING OF DEMAND FOR**
14 **MINERALS USED IN THE ENERGY SECTOR.**

15 (a) IN GENERAL.—Not later than 180 days after the
16 date of enactment of this Act, the Administrator shall de-
17 velop a plan for the forecasting of demand for energy
18 equipment, including equipment for energy production or
19 storage purposes, that uses minerals, such as lithium and
20 cobalt, that are or potentially may be determined to be
21 critical minerals, including—

22 (1) existing markets for manufactured energy-
23 producing and energy-storing equipment; and

1 (2) emerging or potential markets for new en-
2 ergy-producing and energy-storing technologies en-
3 tering commercialization.

4 (b) METRICS.—The plan developed under subsection
5 (a) shall produce forecasts of equipment demand—

6 (1) over the 1-year, 5-year, and 10-year periods
7 beginning on the date on which development of the
8 plan is completed;

9 (2) by particular economic sectors; and

10 (3) according to any other parameters that the
11 Administrator, in collaboration with the Secretary of
12 the Interior, acting through the Director of the
13 United States Geological Survey, determines are
14 needed for the Annual Critical Minerals Outlook.

15 (c) COLLABORATION.—In carrying out subsection
16 (a), the Administrator shall work with—

17 (1) the Secretary with respect to the possible
18 trajectories of emerging energy-producing and en-
19 ergy-storing technologies; and

20 (2) the Secretary of the Interior, acting through
21 the Director of the United States Geological Survey,
22 with respect to the parameters and assessments
23 needed for the Annual Critical Minerals Outlook.

1 **SEC. 4106. EXPANSION OF INTERNATIONAL ENERGY DATA.**

2 (a) IN GENERAL.—Not later than 1 year after the
3 date of enactment of this Act, the Administrator shall im-
4 plement measures to expand and improve the international
5 energy data resources of the Energy Information Adminis-
6 tration in order to understand—

7 (1) the production and use of energy in various
8 countries;

9 (2) changing patterns of energy use internation-
10 ally;

11 (3) the relative costs and environmental impacts
12 of energy production and use internationally; and

13 (4) plans for or construction of major energy
14 facilities or infrastructure.

15 (b) REQUIREMENTS.—In carrying out subsection (a),
16 the Administrator shall—

17 (1) work with, and leverage the data resources
18 of, the International Energy Agency;

19 (2) include detail on energy consumption by
20 fuel, economic sector, and end use within countries
21 for which data are available;

22 (3) collect relevant measures of energy use, in-
23 cluding—

24 (A) cost; and

25 (B) emissions intensity; and

1 (6) electrification, particularly with respect to
2 the transportation, industrial, and buildings sectors;

3 (7) increasing model resolution to represent all
4 hours of the year and all electricity generators;

5 (8) wholesale electricity market design and the
6 appropriate valuation of all services that support the
7 reliability of electricity grids, such as—

8 (A) battery storage; and

9 (B) synthetic inertia from grid-tied invert-
10 ers;

11 (9) economic modeling of the role of energy effi-
12 ciency, demand response, electricity storage, and a
13 variety of distributed generation technologies;

14 (10) the production, transport, use, and storage
15 of carbon dioxide, hydrogen, and hydrogen carriers;

16 (11) greater flexibility in—

17 (A) the modeling of the environmental im-
18 pacts of electricity systems, such as—

19 (i) emissions of greenhouse gases and
20 other pollutants; and

21 (ii) the use of land and water re-
22 sources; and

23 (B) the ability to support climate mod-
24 eling, such as the climate modeling performed
25 by the Office of Biological and Environmental

1 Research in the Office of Science of the Depart-
2 ment;

3 (12) technologies that are in an early stage of
4 commercial deployment and have been identified by
5 the Secretary as candidates for large-scale dem-
6 onstration projects, such as—

7 (A) carbon capture, transport, use, and
8 storage from any source or economic sector;

9 (B) direct air capture;

10 (C) hydrogen production, including via
11 electrolysis;

12 (D) synthetic and biogenic hydrocarbon
13 liquid and gaseous fuels;

14 (E) supercritical carbon dioxide combus-
15 tion turbines;

16 (F) industrial fuel cell and hydrogen com-
17 bustion equipment; and

18 (G) industrial electric boilers;

19 (13) increased and improved data sources and
20 tools, including—

21 (A) the establishment of technology and
22 cost baselines, including technology learning
23 rates;

24 (B) economic, employment, and health im-
25 pacts of energy system policies on households,

1 as a function of household income and region;
2 and

3 (C) the use of behavioral economics to in-
4 form demand modeling in all sectors; and

5 (14) striving to migrate toward a single, con-
6 sistent, and open-source modeling platform, and in-
7 creasing open access to model systems, data, and
8 outcomes, for—

9 (A) disseminating reference scenarios that
10 can be transparently and broadly replicated;
11 and

12 (B) promoting the development of the re-
13 searcher and analyst workforce needed to con-
14 tinue the development and validation of im-
15 proved energy system models in the future.

16 **SEC. 4108. REPORT ON COSTS OF CARBON ABATEMENT IN**
17 **THE ELECTRICITY SECTOR.**

18 Not later than 270 days after the date of enactment
19 of this Act, the Administrator shall submit to Congress
20 a report on—

21 (1) the potential use of levelized cost of carbon
22 abatement (referred to in this section as “LCCA”)
23 or a similar metric in analyzing generators of elec-
24 tricity;

1 (2) the feasibility and impact of incorporating
2 LCCA in long-term forecasts—

3 (A) to compare technical approaches and
4 understand real-time changes in fossil-fuel and
5 nuclear dispatch;

6 (B) to compare the costs of technology op-
7 tions to reduce emissions; and

8 (C) to compare the costs of policy options,
9 including current policies, regarding valid and
10 verifiable reductions and removals of carbon;
11 and

12 (3)(A) a potential process to measure carbon
13 dioxide emissions intensity per unit of output pro-
14 duction for a range of—

15 (i) energy sources;

16 (ii) sectors; and

17 (iii) geographic regions; and

18 (B) a corresponding process to provide an em-
19 pirical framework for reporting the status and costs
20 of carbon dioxide reduction relative to specified
21 goals.

22 **SEC. 4109. HARMONIZATION OF EFFORTS AND DATA.**

23 Not later than 1 year after the date of enactment
24 of this Act, the Administrator shall establish a system to
25 harmonize, to the maximum extent practicable—

1 (1) the data collection efforts of the Adminis-
2 trator, including any data collection required under
3 this subtitle, with the data collection efforts of—

4 (A) the Environmental Protection Agency;

5 (B) other relevant Federal agencies, as the
6 Administrator determines to be appropriate;
7 and

8 (C) State or regional energy credit reg-
9 istries, as the Administrator determines to be
10 appropriate;

11 (2) the data collected under this subtitle, in-
12 cluding the operating data on electricity generation
13 collected under section 4102(a), with data collected
14 by the entities described in subparagraphs (A)
15 through (C) of paragraph (1), including any meas-
16 urements of greenhouse gas and other pollutant
17 emissions collected by the Environmental Protection
18 Agency; and

19 (3) the efforts of the Administrator to identify
20 and report relevant impacts, opportunities, and pat-
21 terns with respect to energy use, including the iden-
22 tification of community-level economic and environ-
23 mental impacts required under section
24 4103(b)(1)(C), with the efforts of the Environmental
25 Protection Agency and other relevant Federal agen-

1 cies, as determined by the Administrator, to identify
2 similar impacts, opportunities, and patterns.

3 **Subtitle C—Miscellaneous**

4 **SEC. 4201. CONSIDERATION OF MEASURES TO PROMOTE** 5 **GREATER ELECTRIFICATION OF THE TRANS-** 6 **PORTATION SECTOR.**

7 (a) IN GENERAL.—Section 111(d) of the Public Util-
8 ity Regulatory Policies Act of 1978 (16 U.S.C. 2621(d))
9 (as amended by section 1004(a)(1)) is amended by adding
10 at the end the following:

11 “(21) ELECTRIC VEHICLE CHARGING PRO-
12 GRAMS.—Each State shall consider measures to pro-
13 mote greater electrification of the transportation sec-
14 tor, including the establishment of rates that—

15 “(A) promote affordable and equitable
16 electric vehicle charging options for both resi-
17 dential and public electric vehicle charging in-
18 frastructure;

19 “(B) facilitate reduced charging times for
20 light-, medium-, and heavy-duty vehicles to im-
21 prove customer experiences;

22 “(C) accelerate third-party investment in
23 public electric vehicle charging stations in order
24 to reduce greenhouse gas emissions in the light-
25 , medium-, and heavy-duty vehicle sectors; and

1 “(D) appropriately recover the marginal
2 costs of delivering electricity to electric vehicles
3 and electric vehicle charging infrastructure.”.

4 (b) COMPLIANCE.—

5 (1) TIME LIMITATION.—Section 112(b) of the
6 Public Utility Regulatory Policies Act of 1978 (16
7 U.S.C. 2622(b)) (as amended by section
8 1004(a)(2)(A)) is amended by adding at the end the
9 following:

10 “(8)(A) Not later than 1 year after the date of
11 enactment of this paragraph, each State regulatory
12 authority (with respect to each electric utility for
13 which the State has ratemaking authority) and each
14 nonregulated utility shall commence consideration
15 under section 111, or set a hearing date for consid-
16 eration, with respect to the standard established by
17 paragraph (21) of section 111(d).

18 “(B) Not later than 2 years after the date of
19 enactment of this paragraph, each State regulatory
20 authority (with respect to each electric utility for
21 which the State has ratemaking authority), and each
22 nonregulated electric utility shall complete the con-
23 sideration and make the determination under section
24 111 with respect to the standard established by
25 paragraph (21) of section 111(d).”.

1 (2) FAILURE TO COMPLY.—Section 112(c) of
2 the Public Utility Regulatory Policies Act of 1978
3 (16 U.S.C. 2622(c)) (as amended by section
4 1004(a)(2)(B)(i)) is amended by adding at the end
5 the following: “In the case of the standard estab-
6 lished by paragraph (21) of section 111(d), the ref-
7 erence contained in this subsection to the date of en-
8 actment of this Act shall be deemed to be a ref-
9 erence to the date of enactment of that paragraph
10 (21).”.

11 (3) PRIOR STATE ACTIONS.—

12 (A) IN GENERAL.—Section 112 of the
13 Public Utility Regulatory Policies Act of 1978
14 (16 U.S.C. 2622) (as amended by section
15 1004(a)(2)(C)(i)) is amended by adding at the
16 end the following:

17 “(h) OTHER PRIOR STATE ACTIONS.—Subsections
18 (b) and (c) shall not apply to the standard established by
19 paragraph (21) of section 111(d) in the case of any elec-
20 tric utility in a State if, before the date of enactment of
21 this subsection—

22 “(1) the State has implemented for the electric
23 utility the standard (or a comparable standard);

24 “(2) the State regulatory authority for the
25 State or the relevant nonregulated electric utility has

1 conducted a proceeding to consider implementation
2 of the standard (or a comparable standard) for the
3 electric utility; or

4 “(3) the State legislature has voted on the im-
5 plementation of the standard (or a comparable
6 standard) for the electric utility during the 3-year
7 period ending on that date of enactment.”.

8 (B) CROSS-REFERENCE.—Section 124 of
9 the Public Utility Regulatory Policies Act of
10 1978 (16 U.S.C. 2634) (as amended by section
11 1004(a)(2)(C)(ii)(II)) is amended by adding at
12 the end the following: “In the case of the stand-
13 ard established by paragraph (21) of section
14 111(d), the reference contained in this section
15 to the date of enactment of this Act shall be
16 deemed to be a reference to the date of enact-
17 ment of that paragraph (21).”.

18 **TITLE V—ENERGY EFFICIENCY**
19 **AND BUILDING INFRASTRUC-**
20 **TURE**

21 **Subtitle A—Residential and**
22 **Commercial Energy Efficiency**

23 **SEC. 5001. DEFINITIONS.**

24 In this subtitle:

1 (1) PRIORITY STATE.—The term “priority
2 State” means a State that—

3 (A) is eligible for funding under the State
4 Energy Program; and

5 (B)(i) is among the 15 States with the
6 highest annual per-capita combined residential
7 and commercial sector energy consumption, as
8 most recently reported by the Energy Informa-
9 tion Administration; or

10 (ii) is among the 15 States with the high-
11 est annual per-capita energy-related carbon di-
12 oxide emissions by State, as most recently re-
13 ported by the Energy Information Administra-
14 tion.

15 (2) PROGRAM.—The term “program” means
16 the program established under section 5002(a).

17 (3) STATE.—The term “State” means a State
18 (as defined in section 3 of the Energy Policy and
19 Conservation Act (42 U.S.C. 6202)), acting through
20 a State energy office.

21 (4) STATE ENERGY PROGRAM.—The term
22 “State Energy Program” means the State Energy
23 Program established under part D of title III of the
24 Energy Policy and Conservation Act (42 U.S.C.
25 6321 et seq.).

1 **SEC. 5002. ENERGY EFFICIENCY REVOLVING LOAN FUND**
2 **CAPITALIZATION GRANT PROGRAM.**

3 (a) IN GENERAL.—Not later than 1 year after the
4 date of enactment of this Act, under the State Energy
5 Program, the Secretary shall establish a program under
6 which the Secretary shall provide capitalization grants to
7 States to establish a revolving loan fund under which the
8 State shall provide loans and grants, as applicable, in ac-
9 cordance with this section.

10 (b) DISTRIBUTION OF FUNDS.—

11 (1) ALL STATES.—

12 (A) IN GENERAL.—Of the amounts made
13 available under subsection (j), the Secretary
14 shall use 40 percent to provide capitalization
15 grants to States that are eligible for funding
16 under the State Energy Program, in accordance
17 with the allocation formula established under
18 section 420.11 of title 10, Code of Federal Reg-
19 ulations (or successor regulations).

20 (B) REMAINING FUNDING.—After applying
21 the allocation formula described in subpara-
22 graph (A), the Secretary shall redistribute any
23 unclaimed funds to the remaining States seek-
24 ing capitalization grants under that subpara-
25 graph.

26 (2) PRIORITY STATES.—

1 (A) IN GENERAL.—Of the amounts made
2 available under subsection (j), the Secretary
3 shall use 60 percent to provide supplemental
4 capitalization grants to priority States in ac-
5 cordance with an allocation formula determined
6 by the Secretary.

7 (B) REMAINING FUNDING.—After applying
8 the allocation formula described in subpara-
9 graph (A), the Secretary shall redistribute any
10 unclaimed funds to the remaining priority
11 States seeking supplemental capitalization
12 grants under that subparagraph.

13 (C) GRANT AMOUNT.—

14 (i) MAXIMUM AMOUNT.—The amount
15 of a supplemental capitalization grant pro-
16 vided to a State under this paragraph shall
17 not exceed \$15,000,000.

18 (ii) SUPPLEMENT NOT SUPPLANT.—A
19 supplemental capitalization grant received
20 by a State under this paragraph shall sup-
21 plement, not supplant, a capitalization
22 grant received by that State under para-
23 graph (1).

24 (c) APPLICATIONS FOR CAPITALIZATION GRANTS.—

25 A State seeking a capitalization grant under the program

1 shall submit to the Secretary an application at such time,
2 in such manner, and containing such information as the
3 Secretary may require, including—

4 (1) a detailed explanation of how the grant will
5 be used, including a plan to establish a new revolving
6 loan fund or use an existing revolving loan fund;

7 (2) the need of eligible recipients for loans and
8 grants in the State for assistance with conducting
9 energy audits;

10 (3) a description of the expected benefits that
11 building infrastructure and energy system upgrades
12 and retrofits will have on communities in the State;
13 and

14 (4) in the case of a priority State seeking a
15 supplemental capitalization grant under subsection
16 (b)(2), a justification for needing the supplemental
17 funding.

18 (d) TIMING.—

19 (1) IN GENERAL.—The Secretary shall establish
20 a timeline with dates by, or periods by the end of,
21 which a State shall—

22 (A) on receipt of a capitalization grant
23 under the program, deposit the grant funds into
24 a revolving loan fund; and

1 (B) begin using the capitalization grant as
2 described in subsection (e)(1).

3 (2) USE OF GRANT.—Under the timeline estab-
4 lished under paragraph (1), a State shall be required
5 to begin using a capitalization grant not more than
6 180 days after the date on which the grant is re-
7 ceived.

8 (e) USE OF GRANT FUNDS.—

9 (1) IN GENERAL.—A State that receives a cap-
10 italization grant under the program—

11 (A) shall provide loans in accordance with
12 paragraph (2); and

13 (B) may provide grants in accordance with
14 paragraph (3).

15 (2) LOANS.—

16 (A) COMMERCIAL ENERGY AUDIT.—

17 (i) IN GENERAL.—A State that re-
18 ceives a capitalization grant under the pro-
19 gram may provide a loan to an eligible re-
20 cipient described in clause (iii) to conduct
21 a commercial energy audit.

22 (ii) AUDIT REQUIREMENTS.—A com-
23 mercial energy audit conducted using a
24 loan provided under clause (i) shall—

1 (I) determine the overall con-
2 sumption of energy of the facility of
3 the eligible recipient;

4 (II) identify and recommend
5 lifecycle cost-effective opportunities to
6 reduce the energy consumption of the
7 facility of the eligible recipient, includ-
8 ing through energy efficient—

9 (aa) lighting;

10 (bb) heating, ventilation,
11 and air conditioning systems;

12 (cc) windows;

13 (dd) appliances; and

14 (ee) insulation and building
15 envelopes;

16 (III) estimate the energy and
17 cost savings potential of the opportu-
18 nities identified in subclause (II)
19 using software approved by the Sec-
20 retary;

21 (IV) identify—

22 (aa) the period and level of
23 peak energy demand for each
24 building within the facility of the
25 eligible recipient; and

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1 (bb) the sources of energy
2 consumption that are contrib-
3 uting the most to that period of
4 peak energy demand;

5 (V) recommend controls and
6 management systems to reduce or re-
7 distribute peak energy consumption;
8 and

9 (VI) estimate the total energy
10 and cost savings potential for the fa-
11 cility of the eligible recipient if all rec-
12 ommended upgrades and retrofits are
13 implemented, using software approved
14 by the Secretary.

15 (iii) ADDITIONAL AUDIT INCLU-
16 SIONS.—A commercial energy audit con-
17 ducted using a loan provided under clause
18 (i) may recommend strategies to increase
19 energy efficiency of the facility of the eligi-
20 ble recipient through use of electric sys-
21 tems or other high-efficiency systems uti-
22 lizing fuels like, but not limited to, natural
23 gas and hydrogen.

1 (iv) ELIGIBLE RECIPIENTS.—An eligi-
2 ble recipient under clause (i) is a business
3 that—

4 (I) conducts the majority of its
5 business in the State that provides the
6 loan under that clause; and

7 (II) owns or operates—

8 (aa) 1 or more commercial
9 buildings; or

10 (bb) commercial space with-
11 in a building that serves multiple
12 functions, such as a building for
13 commercial and residential oper-
14 ations.

15 (B) RESIDENTIAL ENERGY AUDITS.—

16 (i) IN GENERAL.—A State that re-
17 ceives a capitalization grant under the pro-
18 gram may provide a loan to an eligible re-
19 cipient described in clause (iii) to conduct
20 a residential energy audit.

21 (ii) RESIDENTIAL ENERGY AUDIT RE-
22 QUIREMENTS.—A residential energy audit
23 conducted using a loan under clause (i)
24 shall—

1 (I) utilize the same evaluation
2 criteria as the Home Performance As-
3 sessment used in the Energy Star
4 program established under section
5 324A of the Energy Policy and Con-
6 servation Act (42 U.S.C. 6294a);

7 (II) recommend lifecycle cost-ef-
8 fective opportunities to reduce energy
9 consumption within the residential
10 building of the eligible recipient, in-
11 cluding through energy efficient—

12 (aa) lighting;

13 (bb) heating, ventilation,
14 and air conditioning systems;

15 (cc) windows;

16 (dd) appliances; and

17 (ee) insulation and building
18 envelopes;

19 (III) recommend controls and
20 management systems to reduce or re-
21 distribute peak energy consumption;

22 (IV) compare the energy con-
23 sumption of the residential building of
24 the eligible recipient to comparable

1 residential buildings in the same geo-
2 graphic area; and

3 (V) provide a Home Energy
4 Score, or equivalent score, for the res-
5 idential building of the eligible recipi-
6 ent by using the Home Energy Score
7 Tool of the Department or an equiva-
8 lent scoring tool.

9 (iii) ADDITIONAL AUDIT INCLU-
10 SIONS.—A residential energy audit con-
11 ducted using a loan provided under clause
12 (i) may recommend strategies to increase
13 energy efficiency of the facility of the eligi-
14 ble recipient through use of electric sys-
15 tems or other high-efficiency systems uti-
16 lizing fuels like, but not limited to, natural
17 gas and hydrogen.

18 (iv) ELIGIBLE RECIPIENTS.—An eligi-
19 ble recipient under clause (i) is—

20 (I) an individual who owns—

21 (aa) a single family home;

22 (bb) a condominium or du-
23 plex; or

24 (cc) a manufactured housing
25 unit; or

1 (II) a business that owns or oper-
2 ates a multifamily housing facility.

3 (C) COMMERCIAL AND RESIDENTIAL EN-
4 ERGY UPGRADES AND RETROFITS.—

5 (i) IN GENERAL.—A State that re-
6 ceives a capitalization grant under the pro-
7 gram may provide a loan to an eligible re-
8 cipient described in clause (ii) to carry out
9 upgrades or retrofits of building infrastruc-
10 ture and systems that—

11 (I) are recommended in the com-
12 mercial energy audit or residential en-
13 ergy audit, as applicable, completed
14 for the building or facility of the eligi-
15 ble recipient;

16 (II) satisfy at least 1 of the cri-
17 teria in the Home Performance As-
18 sessment used in the Energy Star
19 program established under section
20 324A of the Energy Policy and Con-
21 servation Act (42 U.S.C. 6294a);

22 (III) improve, with respect to the
23 building or facility of the eligible re-
24 cipient—

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1 (aa) the physical comfort of
2 the building or facility occupants;

3 (bb) the energy efficiency of
4 the building or facility; or

5 (cc) the quality of the air in
6 the building or facility; and

7 (IV)(aa) are lifecycle cost-effec-
8 tive; and

9 (bb)(AA) reduce the energy in-
10 tensity of the building or facility of
11 the eligible recipient; or

12 (BB) improve the control and
13 management of energy usage of the
14 building or facility to reduce demand
15 during peak times.

16 (ii) ELIGIBLE RECIPIENTS.—An eligi-
17 ble recipient under clause (i) is an eligible
18 recipient described in subparagraph (A)(iii)
19 or (B)(iii) that—

20 (I) has completed a commercial
21 energy audit described in subpara-
22 graph (A) or a residential energy
23 audit described in subparagraph (B)
24 using a loan provided under the appli-
25 cable subparagraph; or

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1 (II) has completed a commercial
2 energy audit or residential energy
3 audit that—

4 (aa) was not funded by a
5 loan under this paragraph; and

6 (bb)(AA) meets the require-
7 ments for the applicable audit
8 under subparagraph (A) or (B),
9 as applicable; or

10 (BB) the Secretary deter-
11 mines is otherwise satisfactory.

12 (iii) LOAN TERM.—A loan provided
13 under this subparagraph shall be required
14 to be fully amortized by the earlier of—

15 (I) the year in which the up-
16 grades or retrofits carried out using
17 the loan exceed their expected useful
18 life; and

19 (II) 15 years after those up-
20 grades or retrofits are installed.

21 (D) REFERRAL TO QUALIFIED CONTRAC-
22 TORS.—Following the completion of an audit
23 under subparagraph (A) or (B) by an eligible
24 recipient of a loan under the applicable sub-
25 paragraph, the State may refer the eligible re-

1 recipient to a qualified contractor, as determined
2 by the State, to estimate—

3 (i) the upfront capital cost of each
4 recommended upgrade; and

5 (ii) the total upfront capital cost of
6 implementing all recommended upgrades.

7 (E) LOAN RECIPIENTS.—Each State pro-
8 viding loans under this paragraph shall, to the
9 maximum extent practicable, provide loans to
10 eligible recipients that do not have access to
11 private capital.

12 (3) GRANTS AND TECHNICAL ASSISTANCE.—

13 (A) IN GENERAL.—A State that receives a
14 capitalization grant under the program may use
15 not more than 25 percent of the grant funds to
16 provide grants or technical assistance to eligible
17 entities described in subparagraph (B) to carry
18 out the activities described in subparagraphs
19 (A), (B), and (C) of paragraph (2).

20 (B) ELIGIBLE ENTITY.—An entity eligible
21 for a grant or technical assistance under sub-
22 paragraph (A) is—

23 (i) a business that—

24 (I) is an eligible recipient de-
25 scribed in paragraph (2)(A)(iii); and

1 (II) has fewer than 500 employ-
2 ees; or

3 (ii) a low-income individual (as de-
4 fined in section 3 of the Workforce Innova-
5 tion and Opportunity Act (29 U.S.C.
6 3102)) that owns a residential building.

7 (4) ADMINISTRATIVE EXPENSES.—A State that
8 receives a capitalization grant under the program
9 may use not more than 10 percent of the grant
10 funds for administrative expenses.

11 (f) COORDINATION WITH EXISTING PROGRAMS.—A
12 State receiving a capitalization grant under the program
13 is encouraged to utilize and build on existing programs
14 and infrastructure within the State that may aid the State
15 in carrying out a revolving loan fund program.

16 (g) LEVERAGING PRIVATE CAPITAL.—A State receiv-
17 ing a capitalization grant under the program shall, to the
18 maximum extent practicable, use the grant to leverage pri-
19 vate capital.

20 (h) OUTREACH.—The Secretary shall engage in out-
21 reach to inform States of the availability of capitalization
22 grants under the program.

23 (i) REPORT.—Each State that receives a capitaliza-
24 tion grant under the program shall, not later than 1 year

1 after a grant is received, submit to the Secretary a report
2 that describes—

3 (1) the number of recipients to which the State
4 has distributed—

5 (A) loans for—

6 (i) commercial energy audits under
7 subsection (e)(2)(A);

8 (ii) residential energy audits under
9 subsection (e)(2)(B);

10 (iii) energy upgrades and retrofits
11 under subsection (e)(2)(C); and

12 (B) grants under subsection (e)(3); and

13 (2) the average capital cost of upgrades and
14 retrofits across all commercial energy audits and
15 residential energy audits that were conducted in the
16 State using loans provided by the State under sub-
17 section (e).

18 (j) APPROPRIATIONS.—In addition to amounts other-
19 wise made available, there is appropriated to the Secretary
20 to carry out this section, out of any amounts in the Treas-
21 ury not otherwise appropriated, \$250,000,000 for fiscal
22 year 2022, to remain available until expended.

23 **SEC. 5003. ENERGY AUDITOR TRAINING GRANT PROGRAM.**

24 (a) DEFINITIONS.—In this section:

1 (1) COVERED CERTIFICATION.—The term “cov-
2 ered certification” means any of the following certifi-
3 cations:

4 (A) The American Society of Heating, Re-
5 frigerating, and Air-Conditioning Engineers
6 Building Energy Assessment Professional cer-
7 tification.

8 (B) The Association of Energy Engineers
9 Certified Energy Auditor certification.

10 (C) The Building Performance Institute
11 Home Energy Professional Energy Auditor cer-
12 tification.

13 (D) The Residential Energy Services Net-
14 work Home Energy Rater certification.

15 (E) Any other third-party certification rec-
16 ognized by the Department.

17 (F) Any third-party certification that the
18 Secretary determines is equivalent to the certifi-
19 cations described in subparagraphs (A) through
20 (E).

21 (2) ELIGIBLE STATE.—The term “eligible
22 State” means a State that—

23 (A) has a demonstrated need for assistance
24 for training energy auditors; and

1 (B) meets any additional criteria deter-
2 mined necessary by the Secretary.

3 (b) ESTABLISHMENT.—Under the State Energy Pro-
4 gram, the Secretary shall establish a competitive grant
5 program under which the Secretary shall award grants to
6 eligible States to train individuals to conduct energy au-
7 dits or surveys of commercial and residential buildings.

8 (c) APPLICATIONS.—

9 (1) IN GENERAL.—A State seeking a grant
10 under subsection (b) shall submit to the Secretary
11 an application at such time, in such manner, and
12 containing such information as the Secretary may
13 require, including the energy auditor training pro-
14 gram plan described in paragraph (2).

15 (2) ENERGY AUDITOR TRAINING PROGRAM
16 PLAN.—An energy auditor training program plan
17 submitted with an application under paragraph (1)
18 shall include—

19 (A)(i) a proposed training curriculum for
20 energy audit trainees; and

21 (ii) an identification of the covered certifi-
22 cation that those trainees will receive on com-
23 pletion of that training curriculum;

24 (B) the expected per-individual cost of
25 training;

1 (C) a plan for connecting trainees with em-
2 ployment opportunities; and

3 (D) any additional information required by
4 the Secretary.

5 (d) AMOUNT OF GRANT.—The amount of a grant
6 awarded to an eligible State under subsection (b)—

7 (1) shall be determined by the Secretary, taking
8 into account the population of the eligible State; and

9 (2) shall not exceed \$2,000,000 for any eligible
10 State.

11 (e) USE OF FUNDS.—

12 (1) IN GENERAL.—An eligible State that re-
13 ceives a grant under subsection (b) shall use the
14 grant funds—

15 (A) to cover any cost associated with indi-
16 viduals being trained or certified to conduct en-
17 ergy audits by—

18 (i) the State; or

19 (ii) a State-certified third party train-
20 ing program; and

21 (B) subject to paragraph (2), to pay the
22 wages of a trainee during the period in which
23 the trainee receives training and certification.

24 (2) LIMITATION.—Not more than 10 percent of
25 grant funds provided under subsection (b) to an eli-

1 gible State may be used for the purpose described in
2 paragraph (1)(B).

3 (f) CONSULTATION.—In carrying out this section, the
4 Secretary shall consult with the Secretary of Labor.

5 (g) APPROPRIATIONS.—In addition to amounts other-
6 wise made available, there is appropriated to the Secretary
7 to carry out this section, out of any amounts in the Treas-
8 ury not otherwise appropriated, \$8,000,000 for each of fis-
9 cal years 2022 through 2026.

10 **Subtitle B—Buildings**

11 **SEC. 5101. COST-EFFECTIVE CODES IMPLEMENTATION FOR** 12 **EFFICIENCY AND RESILIENCE.**

13 (a) IN GENERAL.—Title III of the Energy Conserva-
14 tion and Production Act (42 U.S.C. 6831 et seq.) is
15 amended by adding at the end the following:

16 **“SEC. 309. COST-EFFECTIVE CODES IMPLEMENTATION FOR** 17 **EFFICIENCY AND RESILIENCE.**

18 “(a) DEFINITIONS.—In this section:

19 “(1) ELIGIBLE ENTITY.—The term ‘eligible en-
20 tity’ means—

21 “(A) a relevant State agency, as deter-
22 mined by the Secretary, such as a State build-
23 ing code agency, State energy office, or Tribal
24 energy office; and

25 “(B) a partnership.

1 “(2) PARTNERSHIP.—The term ‘partnership’
2 means a partnership between an eligible entity de-
3 scribed in paragraph (1)(A) and 1 or more of the
4 following entities:

5 “(A) Local building code agencies.

6 “(B) Codes and standards developers.

7 “(C) Associations of builders and design
8 and construction professionals.

9 “(D) Local and utility energy efficiency
10 programs.

11 “(E) Consumer, energy efficiency, and en-
12 vironmental advocates.

13 “(F) Other entities, as determined by the
14 Secretary.

15 “(3) SECRETARY.—The term ‘Secretary’ means
16 the Secretary of Energy.

17 “(b) ESTABLISHMENT.—

18 “(1) IN GENERAL.—The Secretary shall estab-
19 lish within the Building Technologies Office of the
20 Department of Energy a program under which the
21 Secretary shall award grants on a competitive basis
22 to eligible entities to enable sustained cost-effective
23 implementation of updated building energy codes.

24 “(2) UPDATED BUILDING ENERGY CODE.—An
25 update to a building energy code under this section

1 shall include any update made available after the ex-
2 isting building energy code, even if it is not the most
3 recent updated code available.

4 “(c) CRITERIA; PRIORITY.—In awarding grants
5 under subsection (b), the Secretary shall—

6 “(1) consider—

7 “(A) prospective energy savings and plans
8 to measure the savings;

9 “(B) the long-term sustainability of those
10 measures and savings;

11 “(C) prospective benefits, and plans to as-
12 sess the benefits, including benefits relating
13 to—

14 “(i) resilience and peak load reduc-
15 tion;

16 “(ii) occupant safety and health; and

17 “(iii) environmental performance;

18 “(D) the demonstrated capacity of the eli-
19 gible entity to carry out the proposed project;
20 and

21 “(E) the need of the eligible entity for as-
22 sistance; and

23 “(2) give priority to applications from partner-
24 ships.

25 “(d) ELIGIBLE ACTIVITIES.—

1 “(1) IN GENERAL.—An eligible entity awarded
2 a grant under this section may use the grant
3 funds—

4 “(A) to create or enable State or regional
5 partnerships to provide training and materials
6 to—

7 “(i) builders, contractors and sub-
8 contractors, architects, and other design
9 and construction professionals, relating to
10 meeting updated building energy codes in a
11 cost-effective manner; and

12 “(ii) building code officials, relating to
13 improving implementation of and compli-
14 ance with building energy codes;

15 “(B) to collect and disseminate quan-
16 titative data on construction and codes imple-
17 mentation, including code pathways, perform-
18 ance metrics, and technologies used;

19 “(C) to develop and implement a plan for
20 highly effective codes implementation, including
21 measuring compliance;

22 “(D) to address various implementation
23 needs in rural, suburban, and urban areas; and

24 “(E) to implement updates in energy codes
25 for—

1 “(i) new residential and commercial
2 buildings (including multifamily buildings);
3 and

4 “(ii) additions and alterations to ex-
5 isting residential and commercial buildings
6 (including multifamily buildings).

7 “(2) RELATED TOPICS.—Training and mate-
8 rials provided using a grant under this section may
9 include information on the relationship between en-
10 ergy codes and—

11 “(A) cost-effective, high-performance, and
12 zero-net-energy buildings;

13 “(B) improving resilience, health, and safe-
14 ty;

15 “(C) water savings and other environ-
16 mental impacts; and

17 “(D) the economic impacts of energy
18 codes.

19 “(e) APPROPRIATIONS.—In addition to amounts oth-
20 erwise made available, there is appropriated to the Sec-
21 retary to carry out this section, out of any amounts in
22 the Treasury not otherwise appropriated, \$45,000,000 for
23 each of fiscal years 2022 through 2026.”.

24 (b) CONFORMING AMENDMENT.—Section 303 of the
25 Energy Conservation and Production Act (42 U.S.C.

1 6832) is amended, in the matter preceding paragraph (1),
2 by striking “As used in” and inserting “Except as other-
3 wise provided, in”.

4 **SEC. 5102. BUILDING, TRAINING, AND ASSESSMENT CEN-**
5 **TERS.**

6 (a) IN GENERAL.—The Secretary shall provide
7 grants to institutions of higher education (as defined in
8 section 101 of the Higher Education Act of 1965 (20
9 U.S.C. 1001)) and Tribal Colleges or Universities (as de-
10 fined in section 316(b) of that Act (20 U.S.C. 1059c(b)))
11 to establish building training and assessment centers—

12 (1) to identify opportunities for optimizing en-
13 ergy efficiency and environmental performance in
14 buildings;

15 (2) to promote the application of emerging con-
16 cepts and technologies in commercial and institu-
17 tional buildings;

18 (3) to train engineers, architects, building sci-
19 entists, building energy permitting and enforcement
20 officials, and building technicians in energy-efficient
21 design and operation;

22 (4) to assist institutions of higher education
23 and Tribal Colleges or Universities in training build-
24 ing technicians;

1 (5) to promote research and development for
2 the use of alternative energy sources and distributed
3 generation to supply heat and power for buildings,
4 particularly energy-intensive buildings; and

5 (6) to coordinate with and assist State-accred-
6 ited technical training centers, community colleges,
7 Tribal Colleges or Universities, and local offices of
8 the National Institute of Food and Agriculture and
9 ensure appropriate services are provided under this
10 section to each region of the United States.

11 (b) COORDINATION AND NONDUPLICATION.—

12 (1) IN GENERAL.—The Secretary shall coordi-
13 nate the program with the industrial research and
14 assessment centers program under section 457 of
15 the Energy Independence and Security Act of 2007
16 (as added by section 5201(b)) and with other Fed-
17 eral programs to avoid duplication of effort.

18 (2) COLLOCATION.—To the maximum extent
19 practicable, building, training, and assessment cen-
20 ters established under this section shall be collocated
21 with industrial assessment centers (as defined in
22 section 5211).

23 (c) APPROPRIATIONS.—In addition to amounts other-
24 wise made available, there is appropriated to the Secretary
25 to carry out this section, out of any amounts in the Treas-

1 ury not otherwise appropriated, \$10,000,000 for fiscal
2 year 2022, to remain available until expended.

3 **SEC. 5103. CAREER SKILLS TRAINING.**

4 (a) DEFINITION OF ELIGIBLE ENTITY.—In this sec-
5 tion, the term “eligible entity” means a nonprofit partner-
6 ship that—

7 (1) includes the equal participation of industry,
8 including public or private employers, and labor or-
9 ganizations, including joint labor-management train-
10 ing programs;

11 (2) may include workforce investment boards,
12 community-based organizations, qualified service and
13 conservation corps, educational institutions, small
14 businesses, cooperatives, State and local veterans
15 agencies, and veterans service organizations; and

16 (3) demonstrates—

17 (A) experience in implementing and oper-
18 ating worker skills training and education pro-
19 grams;

20 (B) the ability to identify and involve in
21 training programs carried out under this sec-
22 tion, target populations of individuals who
23 would benefit from training and be actively in-
24 volved in activities relating to energy efficiency
25 and renewable energy industries; and

1 (C) the ability to help individuals achieve
2 economic self-sufficiency.

3 (b) ESTABLISHMENT.—The Secretary shall award
4 grants to eligible entities to pay the Federal share of asso-
5 ciated career skills training programs under which stu-
6 dents concurrently receive classroom instruction and on-
7 the-job training for the purpose of obtaining an industry-
8 related certification to install energy efficient buildings
9 technologies.

10 (c) FEDERAL SHARE.—The Federal share of the cost
11 of carrying out a career skills training program described
12 in subsection (b) shall be 50 percent.

13 (d) APPROPRIATIONS.—In addition to amounts other-
14 wise made available, there is appropriated to the Secretary
15 to carry out this section, out of any amounts in the Treas-
16 ury not otherwise appropriated, \$10,000,000 for fiscal
17 year 2022, to remain available until expended.

18 **SEC. 5104. COMMERCIAL BUILDING ENERGY CONSUMPTION**

19 **INFORMATION SHARING.**

20 (a) DEFINITIONS.—In this section:

21 (1) ADMINISTRATOR.—The term “Adminis-
22 trator” means the Administrator of the Energy In-
23 formation Administration.

1 (2) AGREEMENT.—The term “Agreement”
2 means the agreement entered into under subsection
3 (b).

4 (3) SURVEY.—The term “Survey” means the
5 Commercial Building Energy Consumption Survey.

6 (b) AUTHORIZATION OF AGREEMENT.—Not later
7 than 120 days after the date of enactment of this Act,
8 the Administrator and the Administrator of the Environ-
9 mental Protection Agency shall sign, and submit to Con-
10 gress, an information sharing agreement relating to com-
11 mercial building energy consumption data.

12 (c) CONTENT OF AGREEMENT.—The Agreement
13 shall—

14 (1) provide that—

15 (A) the Administrator shall have access to
16 building-specific data in the Portfolio Manager
17 database of the Environmental Protection
18 Agency; and

19 (B) the Administrator of the Environ-
20 mental Protection Agency shall have access to
21 unmasked, raw building-specific data collected
22 by the Survey;

23 (2) describe the manner in which the Adminis-
24 trator shall incorporate appropriate data (including
25 the data described in subsection (d)) into any Survey

1 published for the 2018 Survey cycle and each subse-
2 quent cycle for the purpose of analyzing and esti-
3 mating building population, size, location, activity,
4 energy usage, and any other relevant building char-
5 acteristic;

6 (3) describe and compare—

7 (A) the methodologies that the Energy In-
8 formation Administration, the Environmental
9 Protection Agency, and State and local govern-
10 ment managers use to maximize the quality, re-
11 liability, and integrity of data collected through
12 the Survey, the Portfolio Manager database of
13 the Environmental Protection Agency, and
14 State and local building energy disclosure laws
15 (including regulations), respectively, and the
16 manner in which those methodologies can be
17 improved; and

18 (B) consistencies and variations in data for
19 the same buildings captured in—

20 (i)(I) the 2018 Survey cycle; and

21 (II) each subsequent Survey cycle;

22 and

23 (ii) the Portfolio Manager database of
24 the Environmental Protection Agency;

1 (4) consider whether, and the methods by
2 which, the Administrator may collect and publish
3 new iterations of Survey data every 3 years—

4 (A) using the Survey processes of the Ad-
5 ministrator; or

6 (B) as supplemented by information in the
7 Portfolio Manager database of the Environ-
8 mental Protection Agency.

9 (d) DATA.—The data referred in subsection (c)(2) in-
10 cludes data that—

11 (1) is collected through the Portfolio Manager
12 database of the Environmental Protection Agency;

13 (2) is required to be publicly available on the
14 internet under State and local government building
15 energy disclosure laws (including regulations); and

16 (3) includes information on private sector build-
17 ings that are not less than 250,000 square feet.

18 (e) PROTECTION OF INFORMATION.—In carrying out
19 the agreement, the Administrator and the Administrator
20 of the Environmental Protection Agency shall protect in-
21 formation in accordance with—

22 (1) section 552(b)(4) of title 5, United States
23 Code (commonly known as the “Freedom of Infor-
24 mation Act”);

1 (2) subchapter III of chapter 35 of title 44,
2 United States Code; and

3 (3) any other applicable law (including regula-
4 tions).

5 **Subtitle C—Industrial Energy** 6 **Efficiency**

7 **PART I—INDUSTRY**

8 **SEC. 5201. FUTURE OF INDUSTRY PROGRAM AND INDUS-** 9 **TRIAL RESEARCH AND ASSESSMENT CEN-** 10 **TERS.**

11 (a) FUTURE OF INDUSTRY PROGRAM.—

12 (1) IN GENERAL.—Section 452 of the Energy
13 Independence and Security Act of 2007 (42 U.S.C.
14 17111) is amended—

15 (A) by striking the section heading and in-
16 serting the following: “**FUTURE OF INDUSTRY**
17 **PROGRAM**”;

18 (B) in subsection (a)(2)—

19 (i) by redesignating subparagraph (E)
20 as subparagraph (F); and

21 (ii) by inserting after subparagraph
22 (D) the following:

23 “(E) water and wastewater treatment fa-
24 cilities, including systems that treat municipal,
25 industrial, and agricultural waste; and”;

1 (C) by striking subsection (e); and
2 (D) by redesignating subsection (f) as sub-
3 section (e).

4 (2) CONFORMING AMENDMENT.—Section
5 454(b)(2)(C) of the Energy Independence and Secu-
6 rity Act of 2007 (42 U.S.C. 17113(b)(2)(C)) is
7 amended by striking “energy-intensive industries”
8 and inserting “Future of Industry”.

9 (b) INDUSTRIAL RESEARCH AND ASSESSMENT CEN-
10 TERS.—Subtitle D of title IV of the Energy Independence
11 and Security Act of 2007 (42 U.S.C. 17111 et seq.) is
12 amended by adding at the end the following:

13 **“SEC. 457. INDUSTRIAL RESEARCH AND ASSESSMENT CEN-**
14 **TERS.**

15 “(a) DEFINITIONS.—In this section:

16 “(1) COVERED PROJECT.—The term ‘covered
17 project’ means a project—

18 “(A) that has been recommended in an en-
19 ergy assessment described in paragraph (2)(A)
20 conducted for an eligible entity; and

21 “(B) with respect to which the plant site
22 of that eligible entity—

23 “(i) improves—

24 “(I) energy efficiency;

25 “(II) material efficiency;

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1 “(III) cybersecurity; or
2 “(IV) productivity; or
3 “(ii) reduces—
4 “(I) waste production;
5 “(II) greenhouse gas emissions;
6 or
7 “(III) nongreenhouse gas pollu-
8 tion.

9 “(2) ELIGIBLE ENTITY.—The term ‘eligible en-
10 tity’ means a small- or medium-sized manufacturer
11 that has had an energy assessment completed by—

12 “(A) an industrial research and assessment
13 center; or

14 “(B) a third-party assessor that provides
15 an assessment equivalent to that of an indus-
16 trial research and assessment center, as deter-
17 mined by the Secretary.

18 “(3) ENERGY SERVICE PROVIDER.—The term
19 ‘energy service provider’ means—

20 “(A) any business providing technology or
21 services to improve the energy efficiency, water
22 efficiency, power factor, or load management of
23 a manufacturing site or other industrial process
24 in an energy-intensive industry (as defined in
25 section 452(a)); and

1 “(B) any utility operating under a utility
2 energy service project.

3 “(4) INDUSTRIAL RESEARCH AND ASSESSMENT
4 CENTER.—The term ‘industrial research and assess-
5 ment center’ means—

6 “(A) an institution of higher education-
7 based industrial research and assessment center
8 that is funded by the Secretary under sub-
9 section (b); and

10 “(B) an industrial research and assess-
11 ment center at a trade school, community col-
12 lege, or union training program that is funded
13 by the Secretary under subsection (f).

14 “(5) PROGRAM.—The term ‘Program’ means
15 the program for implementation grants established
16 under subsection (i)(1).

17 “(6) SMALL- OR MEDIUM-SIZED MANUFAC-
18 Turer.—The term ‘small- or medium-sized manu-
19 facturer’ means a manufacturing firm—

20 “(A) the gross annual sales of which are
21 less than \$100,000,000;

22 “(B) that has fewer than 500 employees at
23 the plant site of the manufacturing firm; and

24 “(C) the annual energy bills of which total
25 more than \$100,000 but less than \$2,500,000.

1 “(b) INSTITUTION OF HIGHER EDUCATION-BASED
2 INDUSTRIAL RESEARCH AND ASSESSMENT CENTERS.—

3 “(1) IN GENERAL.—The Secretary shall provide
4 funding to institution of higher education-based in-
5 dustrial research and assessment centers.

6 “(2) PURPOSE.—The purpose of each institu-
7 tion of higher education-based industrial research
8 and assessment center shall be—

9 “(A) to provide in-depth assessments of
10 small- and medium-sized manufacturer plant
11 sites to evaluate the facilities, services, and
12 manufacturing operations of the plant sites;

13 “(B) to identify opportunities for opti-
14 mizing energy efficiency and environmental per-
15 formance, including implementation of—

16 “(i) smart manufacturing;

17 “(ii) energy management systems;

18 “(iii) sustainable manufacturing;

19 “(iv) information technology advance-
20 ments for supply chain analysis, logistics,
21 system monitoring, industrial and manu-
22 facturing processes, and other purposes;
23 and

24 “(v) waste management systems;

1 “(C) to promote applications of emerging
2 concepts and technologies in small- and me-
3 dium-sized manufacturers (including water and
4 wastewater treatment facilities and federally
5 owned manufacturing facilities);

6 “(D) to promote research and development
7 for the use of alternative energy sources to sup-
8 ply heat, power, and new feedstocks for energy-
9 intensive industries;

10 “(E) to coordinate with appropriate Fed-
11 eral and State research offices;

12 “(F) to provide a clearinghouse for indus-
13 trial process and energy efficiency technical as-
14 sistance resources; and

15 “(G) to coordinate with State-accredited
16 technical training centers and community col-
17 leges, while ensuring appropriate services to all
18 regions of the United States.

19 “(c) COORDINATION.—To increase the value and ca-
20 pabilities of the industrial research and assessment cen-
21 ters, the centers shall—

22 “(1) coordinate with Manufacturing Extension
23 Partnership Centers of the National Institute of
24 Standards and Technology;

1 “(2) coordinate with the Federal Energy Man-
2 agement Program and the Building Technologies Of-
3 fice of the Department of Energy to provide building
4 assessment services to manufacturers;

5 “(3) increase partnerships with the National
6 Laboratories of the Department of Energy to lever-
7 age the expertise, technologies, and research and de-
8 velopment capabilities of the National Laboratories
9 for national industrial and manufacturing needs;

10 “(4) increase partnerships with energy service
11 providers and technology providers to leverage pri-
12 vate sector expertise and accelerate deployment of
13 new and existing technologies and processes for en-
14 ergy efficiency, power factor, and load management;

15 “(5) identify opportunities for reducing green-
16 house gas emissions and other air emissions; and

17 “(6) promote sustainable manufacturing prac-
18 tices for small- and medium-sized manufacturers.

19 “(d) OUTREACH.—The Secretary shall provide fund-
20 ing for—

21 “(1) outreach activities by the industrial re-
22 search and assessment centers to inform small- and
23 medium-sized manufacturers of the information,
24 technologies, and services available; and

1 “(2) coordination activities by each industrial
2 research and assessment center to leverage efforts
3 with—

4 “(A) Federal, State, and Tribal efforts;

5 “(B) the efforts of utilities and energy
6 service providers;

7 “(C) the efforts of regional energy effi-
8 ciency organizations; and

9 “(D) the efforts of other industrial re-
10 search and assessment centers.

11 “(e) CENTERS OF EXCELLENCE.—

12 “(1) ESTABLISHMENT.—The Secretary shall es-
13 tablish a Center of Excellence at not more than 5
14 of the highest-performing industrial research and as-
15 sessment centers, as determined by the Secretary.

16 “(2) DUTIES.—A Center of Excellence shall co-
17 ordinate with and advise the industrial research and
18 assessment centers located in the region of the Cen-
19 ter of Excellence, including—

20 “(A) by mentoring new directors and staff
21 of the industrial research and assessment cen-
22 ters with respect to—

23 “(i) the availability of resources; and

24 “(ii) best practices for carrying out
25 assessments, including through the partici-

1 pation of the staff of the Center of Excel-
2 lence in assessments carried out by new in-
3 dustrial research and assessment centers;

4 “(B) by providing training to staff and
5 students at the industrial research and assess-
6 ment centers on new technologies, practices,
7 and tools to expand the scope and impact of the
8 assessments carried out by the centers;

9 “(C) by assisting the industrial research
10 and assessment centers with specialized tech-
11 nical opportunities, including by providing a
12 clearinghouse of available expertise and tools to
13 assist the centers and clients of the centers in
14 assessing and implementing those opportunities;

15 “(D) by identifying and coordinating with
16 regional, State, local, Tribal, and utility energy
17 efficiency programs for the purpose of facili-
18 tating efforts by industrial research and assess-
19 ment centers to connect industrial facilities re-
20 ceiving assessments from those centers with re-
21 gional, State, local, and utility energy efficiency
22 programs that could aid the industrial facilities
23 in implementing any recommendations resulting
24 from the assessments;

1 “(E) by facilitating coordination between
2 the industrial research and assessment centers
3 and other Federal programs described in para-
4 graphs (1) through (3) of subsection (e); and

5 “(F) by coordinating the outreach activi-
6 ties of the industrial research and assessment
7 centers under subsection (d)(1).

8 “(3) FUNDING.—For each fiscal year, out of
9 any amounts made available to carry out this section
10 under subsection (j), the Secretary shall use not less
11 than \$500,000 to support each Center of Excellence.

12 “(f) EXPANSION OF INDUSTRIAL RESEARCH AND AS-
13 SESSMENT CENTERS.—

14 “(1) IN GENERAL.—The Secretary shall provide
15 funding to establish additional industrial research
16 and assessment centers at trade schools, community
17 colleges, and union training programs.

18 “(2) PURPOSE.—

19 “(A) IN GENERAL.—Subject to subpara-
20 graph (B), to the maximum extent practicable,
21 an industrial research and assessment center
22 established under paragraph (1) shall have the
23 same purpose as an institution of higher edu-
24 cation-based industrial research center that is

1 funded by the Secretary under subsection
2 (b)(1).

3 “(B) CONSIDERATION OF CAPABILITIES.—
4 In evaluating or establishing the purpose of an
5 industrial research and assessment center es-
6 tablished under paragraph (1), the Secretary
7 shall take into consideration the varying capa-
8 bilities of trade schools, community colleges,
9 and union training programs.

10 “(g) WORKFORCE TRAINING.—

11 “(1) INTERNSHIPS.—The Secretary shall pay
12 the Federal share of associated internship programs
13 under which students work with or for industries,
14 manufacturers, and energy service providers to im-
15 plement the recommendations of industrial research
16 and assessment centers.

17 “(2) APPRENTICESHIPS.—The Secretary shall
18 pay the Federal share of associated apprenticeship
19 programs under which—

20 “(A) students work with or for industries,
21 manufacturers, and energy service providers to
22 implement the recommendations of industrial
23 research and assessment centers; and

24 “(B) employees of facilities that have re-
25 ceived an assessment from an industrial re-

1 search and assessment center work with or for
2 an industrial research and assessment center to
3 gain knowledge on engineering practices and
4 processes to improve productivity and energy
5 savings.

6 “(3) FEDERAL SHARE.—The Federal share of
7 the cost of carrying out internship programs de-
8 scribed in paragraph (1) and apprenticeship pro-
9 grams described in paragraph (2) shall be 50 per-
10 cent.

11 “(h) SMALL BUSINESS LOANS.—The Administrator
12 of the Small Business Administration shall, to the max-
13 imum extent practicable, expedite consideration of applica-
14 tions from eligible small business concerns for loans under
15 the Small Business Act (15 U.S.C. 631 et seq.) to imple-
16 ment recommendations developed by the industrial re-
17 search and assessment centers.

18 “(i) IMPLEMENTATION GRANTS.—

19 “(1) IN GENERAL.—The Secretary shall estab-
20 lish a program under which the Secretary shall pro-
21 vide grants to eligible entities to implement covered
22 projects.

23 “(2) APPLICATION.—An eligible entity seeking
24 a grant under the Program shall submit to the Sec-
25 retary an application at such time, in such manner,

1 and containing such information as the Secretary
2 may require, including a demonstration of need for
3 financial assistance to implement the proposed cov-
4 ered project.

5 “(3) PRIORITY.—In awarding grants under the
6 Program, the Secretary shall give priority to eligible
7 entities that—

8 “(A) have had an energy assessment com-
9 pleted by an industrial research and assessment
10 center; and

11 “(B) propose to carry out a covered project
12 with a greater potential for—

13 “(i) energy efficiency gains; or

14 “(ii) greenhouse gas emissions reduc-
15 tions.

16 “(4) GRANT AMOUNT.—

17 “(A) MAXIMUM AMOUNT.—The amount of
18 a grant provided to an eligible entity under the
19 Program shall not exceed \$300,000.

20 “(B) FEDERAL SHARE.—A grant awarded
21 under the Program for a covered project shall
22 be in an amount that is not more than 50 per-
23 cent of the cost of the covered project.

24 “(C) SUPPLEMENT.—A grant received by
25 an eligible entity under the Program shall sup-

1 plement, not supplant, any private or State
2 funds available to the eligible entity to carry
3 out the covered project.

4 “(j) APPROPRIATIONS.—In addition to amounts oth-
5 erwise made available, there is appropriated to the Sec-
6 retary, out of any amounts in the Treasury not otherwise
7 appropriated, for each of fiscal years 2022 through
8 2026—

9 “(1) \$30,000,000 to carry out subsections (a)
10 through (h); and

11 “(2) \$80,000,000 to carry out subsection (i).”.

12 (c) CLERICAL AMENDMENT.—The table of contents
13 of the Energy Independence and Security Act of 2007 (42
14 U.S.C. prec. 17001) is amended by adding at the end of
15 the items relating to subtitle D of title IV the following:

“Sec. 457. Industrial research and assessment centers.”.

16 **SEC. 5202. SUSTAINABLE MANUFACTURING INITIATIVE.**

17 (a) IN GENERAL.—Part E of title III of the Energy
18 Policy and Conservation Act (42 U.S.C. 6341 et seq.) is
19 amended by adding at the end the following:

20 **“SEC. 376. SUSTAINABLE MANUFACTURING INITIATIVE.**

21 “(a) IN GENERAL.—As part of the Office of Energy
22 Efficiency and Renewable Energy of the Department of
23 Energy, the Secretary, on the request of a manufacturer,
24 shall carry out onsite technical assessments to identify op-
25 portunities for—

1 “(1) maximizing the energy efficiency of indus-
2 trial processes and cross-cutting systems;

3 “(2) preventing pollution and minimizing waste;

4 “(3) improving efficient use of water in manu-
5 facturing processes;

6 “(4) conserving natural resources; and

7 “(5) achieving such other goals as the Secretary
8 determines to be appropriate.

9 “(b) COORDINATION.—To implement any rec-
10 ommendations resulting from an onsite technical assess-
11 ment carried out under subsection (a) and to accelerate
12 the adoption of new and existing technologies and proc-
13 esses that improve energy efficiency, the Secretary shall
14 coordinate with—

15 “(1) the Advanced Manufacturing Office of the
16 Department of Energy;

17 “(2) the Building Technologies Office of the
18 Department of Energy;

19 “(3) the Federal Energy Management Program
20 of the Department of Energy; and

21 “(4) the private sector and other appropriate
22 agencies, including the National Institute of Stand-
23 ards and Technology.

24 “(c) RESEARCH AND DEVELOPMENT PROGRAM FOR
25 SUSTAINABLE MANUFACTURING AND INDUSTRIAL TECH-

1 NOLOGIES AND PROCESSES.—As part of the industrial ef-
2 ficiency programs of the Department of Energy, the Sec-
3 retary shall carry out a joint industry-government partner-
4 ship program to research, develop, and demonstrate new
5 sustainable manufacturing and industrial technologies and
6 processes that maximize the energy efficiency of industrial
7 plants, reduce pollution, and conserve natural resources.”.

8 (b) CLERICAL AMENDMENT.—The table of contents
9 of the Energy Policy and Conservation Act (42 U.S.C.
10 prec. 6201) is amended by adding at the end of the items
11 relating to part E of title III the following:

“Sec. 376. Sustainable manufacturing initiative.”.

12 **PART II—SMART MANUFACTURING**

13 **SEC. 5211. DEFINITIONS.**

14 In this part:

15 (1) ENERGY MANAGEMENT SYSTEM.—The term
16 “energy management system” means a business
17 management process based on standards of the
18 American National Standards Institute that enables
19 an organization to follow a systematic approach in
20 achieving continual improvement of energy perform-
21 ance, including energy efficiency, security, use, and
22 consumption.

23 (2) INDUSTRIAL ASSESSMENT CENTER.—The
24 term “industrial assessment center” means a center
25 located at an institution of higher education that—

1 (A) receives funding from the Department;

2 (B) provides an in-depth assessment of
3 small- and medium-size manufacturer plant
4 sites to evaluate the facilities, services, and
5 manufacturing operations of the plant site; and

6 (C) identifies opportunities for potential
7 savings for small- and medium-size manufac-
8 turer plant sites from energy efficiency improve-
9 ments, waste minimization, pollution preven-
10 tion, and productivity improvement.

11 (3) INFORMATION AND COMMUNICATION TECH-
12 NOLOGY.—The term “information and communica-
13 tion technology” means any electronic system or
14 equipment (including the content contained in the
15 system or equipment) used to create, convert, com-
16 municate, or duplicate data or information, including
17 computer hardware, firmware, software, communica-
18 tion protocols, networks, and data interfaces.

19 (4) INSTITUTION OF HIGHER EDUCATION.—The
20 term “institution of higher education” has the
21 meaning given the term in section 101(a) of the
22 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

23 (5) NORTH AMERICAN INDUSTRY CLASSIFICA-
24 TION SYSTEM.—The term “North American Indus-
25 try Classification System” means the standard used

1 by Federal statistical agencies in classifying business
2 establishments for the purpose of collecting, ana-
3 lyzing, and publishing statistical data relating to the
4 business economy of the United States.

5 (6) SMALL AND MEDIUM MANUFACTURERS.—
6 The term “small and medium manufacturers”
7 means manufacturing firms—

8 (A) classified in the North American In-
9 dustry Classification System as any of sectors
10 31 through 33;

11 (B) with gross annual sales of less than
12 \$100,000,000;

13 (C) with fewer than 500 employees at the
14 plant site; and

15 (D) with annual energy bills totaling more
16 than \$100,000 and less than \$2,500,000.

17 (7) SMART MANUFACTURING.—The term
18 “smart manufacturing” means advanced tech-
19 nologies in information, automation, monitoring,
20 computation, sensing, modeling, artificial intel-
21 ligence, analytics, and networking that—

22 (A) digitally—

23 (i) simulate manufacturing production
24 lines;

- 1 (ii) operate computer-controlled man-
2 ufacturing equipment;
- 3 (iii) monitor and communicate pro-
4 duction line status; and
- 5 (iv) manage and optimize energy pro-
6 ductivity and cost throughout production;
- 7 (B) model, simulate, and optimize the en-
8 ergy efficiency of a factory building;
- 9 (C) monitor and optimize building energy
10 performance;
- 11 (D) model, simulate, and optimize the de-
12 sign of energy efficient and sustainable prod-
13 ucts, including the use of digital prototyping
14 and additive manufacturing to enhance product
15 design;
- 16 (E) connect manufactured products in net-
17 works to monitor and optimize the performance
18 of the networks, including automated network
19 operations; and
- 20 (F) digitally connect the supply chain net-
21 work.

1 **SEC. 5212. LEVERAGING EXISTING AGENCY PROGRAMS TO**
2 **ASSIST SMALL AND MEDIUM MANUFACTUR-**
3 **ERS.**

4 (a) **EXPANSION OF TECHNICAL ASSISTANCE PRO-**
5 **GRAMS.**—The Secretary shall expand the scope of tech-
6 nologies covered by the industrial assessment centers of
7 the Department—

8 (1) to include smart manufacturing technologies
9 and practices; and

10 (2) to equip the directors of the industrial as-
11 sessment centers with the training and tools nec-
12 essary to provide technical assistance in smart man-
13 ufacturing technologies and practices, including en-
14 ergy management systems, to manufacturers.

15 (b) **FUNDING.**—The Secretary shall use unobligated
16 funds of the Department to carry out this section.

17 **SEC. 5213. LEVERAGING SMART MANUFACTURING INFRA-**
18 **STRUCTURE AT NATIONAL LABORATORIES.**

19 (a) **STUDY.**—

20 (1) **IN GENERAL.**—Not later than 180 days
21 after the date of enactment of this Act, the Sec-
22 retary shall conduct a study on how the Department
23 can increase access to existing high-performance
24 computing resources in the National Laboratories,
25 particularly for small and medium manufacturers.

1 (2) INCLUSIONS.—In identifying ways to in-
2 crease access to National Laboratories under para-
3 graph (1), the Secretary shall—

4 (A) focus on increasing access to the com-
5 puting facilities of the National Laboratories;
6 and

7 (B) ensure that—

8 (i) the information from the manufac-
9 turer is protected; and

10 (ii) the security of the National Lab-
11 oratory facility is maintained.

12 (3) REPORT.—Not later than 1 year after the
13 date of enactment of this Act, the Secretary shall
14 submit to Congress a report describing the results of
15 the study.

16 (b) ACTIONS FOR INCREASED ACCESS.—The Sec-
17 retary shall facilitate access to the National Laboratories
18 studied under subsection (a) for small and medium manu-
19 facturers so that small and medium manufacturers can
20 fully use the high-performance computing resources of the
21 National Laboratories to enhance the manufacturing com-
22 petitiveness of the United States.

23 **SEC. 5214. STATE MANUFACTURING LEADERSHIP.**

24 (a) FINANCIAL ASSISTANCE AUTHORIZED.—The
25 Secretary may provide financial assistance on a competi-

1 tive basis to States for the establishment of programs to
2 be used as models for supporting the implementation of
3 smart manufacturing technologies.

4 (b) APPLICATIONS.—

5 (1) IN GENERAL.—To be eligible to receive fi-
6 nancial assistance under this section, a State shall
7 submit to the Secretary an application at such time,
8 in such manner, and containing such information as
9 the Secretary may require.

10 (2) CRITERIA.—The Secretary shall evaluate an
11 application for financial assistance under this section
12 on the basis of merit using criteria identified by the
13 Secretary, including—

14 (A) technical merit, innovation, and im-
15 pact;

16 (B) research approach, workplan, and
17 deliverables;

18 (C) academic and private sector partners;

19 and

20 (D) alternate sources of funding.

21 (c) REQUIREMENTS.—

22 (1) TERM.—The term of an award of financial
23 assistance under this section shall not exceed 3
24 years.

1 (2) MAXIMUM AMOUNT.—The amount of an
2 award of financial assistance under this section shall
3 be not more than \$2,000,000.

4 (3) MATCHING REQUIREMENT.—Each State
5 that receives financial assistance under this section
6 shall contribute matching funds in an amount equal
7 to not less than 30 percent of the amount of the fi-
8 nancial assistance.

9 (d) USE OF FUNDS.—

10 (1) IN GENERAL.—A State may use financial
11 assistance provided under this section—

12 (A) to facilitate access to high-performance
13 computing resources for small and medium
14 manufacturers; and

15 (B) to provide assistance to small and me-
16 dium manufacturers to implement smart manu-
17 facturing technologies and practices.

18 (e) EVALUATION.—The Secretary shall conduct semi-
19 annual evaluations of each award of financial assistance
20 under this section—

21 (1) to determine the impact and effectiveness of
22 programs funded with the financial assistance; and

23 (2) to provide guidance to States on ways to
24 better execute the program of the State.

1 (f) AUTHORIZATION.—There is authorized to be ap-
2 propriated to the Secretary to carry out this section
3 \$10,000,000 for each of fiscal years [2022 through
4 2026].

5 **SEC. 5215. REPORT.**

6 The Secretary annually shall submit to Congress and
7 make publicly available a report on the progress made in
8 advancing smart manufacturing in the United States.

9 **Subtitle D—Schools and Nonprofits**

10 **SEC. 5301. GRANTS FOR ENERGY EFFICIENCY IMPROVE-**
11 **MENTS AND RENEWABLE ENERGY IMPROVE-**
12 **MENTS AT PUBLIC SCHOOL FACILITIES.**

13 (a) DEFINITIONS.—In this section:

14 (1) ELIGIBLE ENTITY.—The term “eligible enti-
15 ty” means a consortium of—

16 (A) 1 local educational agency; and

17 (B) 1 or more—

18 (i) schools;

19 (ii) nonprofit organizations;

20 (iii) for-profit organizations; or

21 (iv) community partners that have the
22 knowledge and capacity to partner and as-
23 sist with energy improvements.

24 (2) ENERGY IMPROVEMENT.—The term “en-
25 ergy improvement” means—

1 (A) any improvement, repair, or renovation
2 to a school that results in a direct reduction in
3 school energy costs, including improvements to
4 the envelope, air conditioning system, ventila-
5 tion system, heating system, domestic hot water
6 heating system, compressed air system, dis-
7 tribution system, lighting system, power system,
8 and controls of a building;

9 (B) any improvement, repair, or renovation
10 to, or installation in, a school that leads to an
11 improvement in teacher and student health, in-
12 cluding indoor air quality, daylighting, ventila-
13 tion, electrical lighting, windows, roofing (in-
14 cluding green roofs), outdoor gardens, and
15 acoustics;

16 (C) any improvement, repair, or renovation
17 to a school involving the installation of renew-
18 able energy technologies (such as wind power,
19 photovoltaics, solar thermal systems, geo-
20 thermal energy, hydrogen-fueled systems, bio-
21 mass-based systems, biofuels, anaerobic digest-
22 ers, and hydropower);

23 (D) the installation of zero-emissions vehi-
24 cle infrastructure on school grounds for—

1 (i) exclusive use of school buses,
2 school fleets, or students; or

3 (ii) the general public; and

4 (E) the purchase or lease of zero-emissions
5 vehicles to be used by a school, including school
6 buses, fleet vehicles, and other operational vehi-
7 cles.

8 (3) HIGH SCHOOL.—The term “high school”
9 has the meaning given the term in section 8101 of
10 the Elementary and Secondary Education Act of
11 1965 (20 U.S.C. 7801).

12 (4) LOCAL EDUCATIONAL AGENCY.—The term
13 “local educational agency” has the meaning given
14 the term in section 8101 of the Elementary and Sec-
15 ondary Education Act of 1965 (20 U.S.C. 7801).

16 (5) PARTNERING LOCAL EDUCATIONAL AGEN-
17 CY.—The term “partnering local educational agen-
18 cy”, with respect to an eligible entity, means the
19 local educational agency participating in the consor-
20 tium of the eligible entity.

21 (6) ZERO-EMISSIONS VEHICLE INFRASTRUC-
22 TURE.—The term “zero-emissions vehicle infrastruc-
23 ture” means infrastructure used to charge or fuel—

1 (A) a zero-emission vehicle (as defined in
2 section 88.102–94 of title 40, Code of Federal
3 Regulations (or successor regulation)); or

4 (B) a vehicle that produces zero exhaust
5 emissions of any criteria pollutant (or precursor
6 pollutant) or greenhouse gas under any possible
7 operational mode or condition.

8 (b) GRANTS.—The Secretary shall award competitive
9 grants to eligible entities to make energy improvements
10 in accordance with this section.

11 (c) APPLICATIONS.—

12 (1) IN GENERAL.—An eligible entity desiring a
13 grant under this section shall submit to the Sec-
14 retary an application at such time, in such manner,
15 and containing such information as the Secretary
16 may require.

17 (2) CONTENTS.—The application submitted
18 under paragraph (1) shall include each of the fol-
19 lowing:

20 (A) A needs assessment of the current con-
21 dition of the school and school facilities that
22 will receive the energy improvements.

23 (B) A draft work plan of the intended
24 achievements of the eligible entity at the school.

1 (C) A description of the energy improve-
2 ments that the eligible entity will carry out at
3 the school.

4 (D) A description of the capacity of the eli-
5 gible entity to provide services and comprehen-
6 sive support to make the energy improvements
7 referred to in subparagraph (C).

8 (E) An assessment of the expected needs
9 of the eligible entity for operation and mainte-
10 nance training funds, and a plan for use of
11 those funds, if applicable.

12 (F) An assessment of the expected energy
13 efficiency and safety benefits of the energy im-
14 provements.

15 (G) A cost estimate of the proposed energy
16 improvements.

17 (H) An identification of other resources
18 that are available to carry out the activities for
19 which grant funds are requested under this sec-
20 tion, including the availability of utility pro-
21 grams and public benefit funds.

22 (d) PRIORITY.—

23 (1) IN GENERAL.—In awarding grants under
24 this section, the Secretary shall give priority to an
25 eligible entity—

1 (A) that has renovation, repair, and im-
2 provement funding needs; and

3 (B)(i) that, as determined by the Sec-
4 retary, serves a high percentage of students, in-
5 cluding students in a high school in accordance
6 with paragraph (2), who are eligible for a free
7 or reduced price lunch under the Richard B.
8 Russell National School Lunch Act (42 U.S.C.
9 1751 et seq.); or

10 (ii) the partnering local educational agency
11 of which is designated with a school district lo-
12 cale code of 41, 42, or 43, as determined by the
13 National Center for Education Statistics in con-
14 sultation with the Bureau of the Census.

15 (2) HIGH SCHOOL STUDENTS.—In the case of
16 students in a high school, the percentage of students
17 eligible for a free or reduced price lunch described
18 in paragraph (1)(B)(i) shall be calculated using data
19 from the schools that feed into the high school.

20 (e) COMPETITIVE CRITERIA.—The competitive cri-
21 teria used by the Secretary to award grants under this
22 section shall include the following:

23 (1) The extent of the disparity between the fis-
24 cal capacity of the eligible entity to carry out energy
25 improvements at school facilities and the needs of

1 the partnering local educational agency for those en-
2 ergy improvements, including consideration of—

3 (A) the current and historic ability of the
4 partnering local educational agency to raise
5 funds for construction, renovation, moderniza-
6 tion, and major repair projects for schools;

7 (B) the ability of the partnering local edu-
8 cational agency to issue bonds or receive other
9 funds to support the current infrastructure
10 needs of the partnering local educational agency
11 for schools; and

12 (C) the bond rating of the partnering local
13 educational agency.

14 (2) The likelihood that the partnering local edu-
15 cational agency or eligible entity will maintain, in
16 good condition, any school and school facility that is
17 the subject of improvements.

18 (3) The potential energy efficiency and safety
19 benefits from the proposed energy improvements.

20 (f) USE OF GRANT AMOUNTS.—

21 (1) IN GENERAL.—Except as provided in this
22 subsection, an eligible entity receiving a grant under
23 this section shall use the grant amounts only to
24 make the energy improvements described in the ap-

1 plication submitted by the eligible entity under sub-
2 section (c).

3 (2) OPERATION AND MAINTENANCE TRAIN-
4 ING.—An eligible entity receiving a grant under this
5 section may use not more than 5 percent of the
6 grant amounts for operation and maintenance train-
7 ing for energy efficiency and renewable energy im-
8 provements, such as maintenance staff and teacher
9 training, education, and preventative maintenance
10 training.

11 (3) THIRD-PARTY INVESTIGATION AND ANAL-
12 YSIS.—An eligible entity receiving a grant under this
13 section may use a portion of the grant amounts for
14 a third-party investigation and analysis of the en-
15 ergy improvements carried out by the eligible entity,
16 such as energy audits and existing building commis-
17 sioning.

18 (4) CONTINUING EDUCATION.—An eligible enti-
19 ty receiving a grant under this section may use not
20 more than 3 percent of the grant amounts to develop
21 a continuing education curriculum relating to energy
22 improvements.

23 (g) COMPETITION IN CONTRACTING.—If an eligible
24 entity receiving a grant under this section uses grant
25 funds to carry out repair or renovation through a contract,

1 the eligible entity shall be required to ensure that the con-
2 tract process—

3 (1) through full and open competition, ensures
4 the maximum practicable number of qualified bid-
5 ders, including small, minority, and women-owned
6 businesses; and

7 (2) gives priority to businesses located in, or re-
8 sources common to, the State or geographical area
9 in which the repair or renovation under the contract
10 will be carried out.

11 (h) BEST PRACTICES.—The Secretary shall develop
12 and publish guidelines and best practices for activities car-
13 ried out under this section.

14 (i) REPORT BY ELIGIBLE ENTITY.—An eligible entity
15 receiving a grant under this section shall submit to the
16 Secretary, at such time as the Secretary may require, a
17 report describing—

18 (1) the use of the grant funds for energy im-
19 provements;

20 (2) the estimated cost savings realized by those
21 energy improvements;

22 (3) the results of any third-party investigation
23 and analysis conducted relating to those energy im-
24 provements;

1 (4) the use of any utility programs and public
2 benefit funds; and

3 (5) the use of performance tracking for energy
4 improvements, such as—

5 (A) the Energy Star program established
6 under section 324A of the Energy Policy and
7 Conservation Act (42 U.S.C. 6294a); or

8 (B) the United States Green Building
9 Council Leadership in Energy and Environ-
10 mental Design (LEED) green building rating
11 system for existing buildings.

12 (j) APPROPRIATIONS.—In addition to amounts other-
13 wise made available, there is appropriated to the Secretary
14 to carry out this section, out of any amounts in the Treas-
15 ury not otherwise appropriated, \$100,000,000 for each of
16 fiscal years 2022 through 2026.

17 **SEC. 5302. ENERGY EFFICIENCY MATERIALS PILOT PRO-**
18 **GRAM.**

19 (a) DEFINITIONS.—In this section:

20 (1) APPLICANT.—The term “applicant” means
21 a nonprofit organization that applies for a grant
22 under this section.

23 (2) ENERGY-EFFICIENCY MATERIAL.—

24 (A) IN GENERAL.—The term “energy-effi-
25 ciency material” means a material (including a

1 product, equipment, or system) the installation
2 of which results in a reduction in use by a non-
3 profit organization of energy or fuel.

4 (B) INCLUSIONS.—The term “energy-effi-
5 ciency material” includes—

6 (i) a roof or lighting system or compo-
7 nent of the system;

8 (ii) a window;

9 (iii) a door, including a security door;

10 (iv) a heating, ventilation, or air con-
11 ditioning system or component of the sys-
12 tem (including insulation and wiring and
13 plumbing improvements needed to serve a
14 more efficient system); and

15 (v) a renewable energy generation or
16 heating system, including a solar, photo-
17 voltaic, wind, geothermal, or biomass (in-
18 cluding wood pellet) system or component
19 of the system.

20 (3) NONPROFIT BUILDING.—

21 (A) IN GENERAL.—The term “nonprofit
22 building” means a building operated and owned
23 by an organization that is described in section
24 501(c)(3) of the Internal Revenue Code of 1986

1 and exempt from tax under section 501(a) of
2 such Code.

3 (B) INCLUSIONS.—The term “nonprofit
4 building” includes a building described in sub-
5 paragraph (A) that is—

6 (i) a hospital;

7 (ii) a youth center;

8 (iii) a school;

9 (iv) a social-welfare program facility;

10 (v) a faith-based organization; or

11 (vi) any other nonresidential and non-
12 commercial structure.

13 (b) ESTABLISHMENT.—Not later than 1 year after
14 the date of enactment of this Act, the Secretary shall es-
15 tablish a pilot program to award grants for the purpose
16 of providing nonprofit buildings with energy-efficiency ma-
17 terials.

18 (c) GRANTS.—

19 (1) IN GENERAL.—The Secretary may award
20 grants under the program established under sub-
21 section (b).

22 (2) APPLICATION.—The Secretary may award a
23 grant under paragraph (1) if an applicant submits
24 to the Secretary an application at such time, in such

1 form, and containing such information as the Sec-
2 retary may prescribe.

3 (3) CRITERIA FOR GRANT.—In determining
4 whether to award a grant under paragraph (1), the
5 Secretary shall apply performance-based criteria,
6 which shall give priority to applicants based on—

7 (A) the energy savings achieved;

8 (B) the cost effectiveness of the use of en-
9 ergy-efficiency materials;

10 (C) an effective plan for evaluation, meas-
11 urement, and verification of energy savings; and

12 (D) the financial need of the applicant.

13 (4) LIMITATION ON INDIVIDUAL GRANT
14 AMOUNT.—Each grant awarded under this section
15 shall not exceed \$200,000.

16 (d) APPROPRIATIONS.—In addition to amounts other-
17 wise made available, there is appropriated to the Secretary
18 to carry out this section, out of any amounts in the Treas-
19 ury not otherwise appropriated, \$10,000,000 for each of
20 fiscal years 2022 through 2026, to remain available until
21 expended.

22 **Subtitle E—Miscellaneous**

23 **SEC. 5401. WEATHERIZATION ASSISTANCE PROGRAM.**

24 In addition to amounts otherwise available, there is
25 appropriated to the Secretary, out of any amounts in the

1 Treasury not otherwise appropriated, for the weatheriza-
2 tion assistance program established under part A of title
3 IV of the Energy Conservation and Production Act (42
4 U.S.C. 6861 et seq.) \$3,500,000,000 for fiscal year 2022,
5 to remain available until expended.

6 **SEC. 5402. ENERGY EFFICIENCY AND CONSERVATION**
7 **BLOCK GRANT PROGRAM.**

8 In addition to amounts otherwise available, there is
9 appropriated to the Secretary, out of any amounts in the
10 Treasury not otherwise appropriated, for the Energy Effi-
11 ciency and Conservation Block Grant Program established
12 under section 542(a) of the Energy Independence and Se-
13 curity Act of 2007 (42 U.S.C. 17152(a)) \$550,000,000
14 for fiscal year 2022, to remain available until expended.

15 **SEC. 5403. SURVEY, ANALYSIS, AND REPORT ON EMPLOY-**
16 **MENT AND DEMOGRAPHICS IN THE ENERGY,**
17 **ENERGY EFFICIENCY, AND MOTOR VEHICLE**
18 **SECTORS OF THE UNITED STATES.**

19 (a) ENERGY JOBS COUNCIL.—

20 (1) ESTABLISHMENT.—The Secretary shall es-
21 tablish a council, to be known as the “Energy Jobs
22 Council” (referred to in this section as the “Coun-
23 cil”).

24 (2) MEMBERSHIP.—The Council shall be com-
25 prised of—

1 (A) to be appointed by the Secretary—

2 (i) 1 or more representatives of the
3 Energy Information Administration; and

4 (ii) 1 or more representatives of a
5 State energy office that are serving as
6 members of the State Energy Advisory
7 Board established by section 365(g) of the
8 Energy Policy and Conservation Act (42
9 U.S.C. 6325(g));

10 (B) to be appointed by the Secretary of
11 Commerce—

12 (i) 1 or more representatives of the
13 Department of Commerce; and

14 (ii) 1 or more representatives of the
15 Bureau of the Census;

16 (C) 1 or more representatives of the Bu-
17 reau of Labor Statistics, to be appointed by the
18 Secretary of Labor; and

19 (D) 1 or more representatives of any other
20 Federal agency the assistance of which is re-
21 quired to carry out this section, as determined
22 by the Secretary, to be appointed by the head
23 of the applicable agency.

24 (b) SURVEY AND ANALYSIS.—

25 (1) IN GENERAL.—The Council shall—

1 (A) conduct a survey of employers in the
2 energy, energy efficiency, and motor vehicle sec-
3 tors of the economy of the United States; and

4 (B) perform an analysis of the employment
5 figures and demographics in those sectors, in-
6 cluding the number of personnel in each sector
7 who devote a substantial portion of working
8 hours, as determined by the Secretary, to com-
9 pliance matters.

10 (2) METHODOLOGY.—In conducting the survey
11 and analysis under paragraph (1), the Council shall
12 employ a methodology that—

13 (A) was approved in 2016 by the Office of
14 Management and Budget for use in the docu-
15 ment entitled “OMB Control Number 1910–
16 5179”;

17 (B) uses a representative, stratified sam-
18 pling of businesses in the United States; and

19 (C) is designed to elicit a comparable num-
20 ber of responses from businesses in each State
21 and with the same North American Industry
22 Classification System codes as were received for
23 the 2016 and 2017 reports entitled “U.S. En-
24 ergy and Employment Report”.

1 (3) CONSULTATION.—In conducting the survey
2 and analysis under paragraph (1), the Council shall
3 consult with key stakeholders, including—

4 (A) as the Council determines to be appro-
5 priate, the heads of relevant Federal agencies
6 and offices, including—

7 (i) the Secretary of Commerce;

8 (ii) the Secretary of Transportation;

9 (iii) the Director of the Bureau of the
10 Census;

11 (iv) the Commissioner of the Bureau
12 of Labor Statistics; and

13 (v) the Administrator of the Environ-
14 mental Protection Agency;

15 (B) States;

16 (C) the State Energy Advisory Board es-
17 tablished by section 365(g) of the Energy Pol-
18 icy and Conservation Act (42 U.S.C. 6325(g));
19 and

20 (D) energy industry trade associations.

21 (c) REPORT.—

22 (1) IN GENERAL.—Not later than 1 year after
23 the date of enactment of this Act, and annually
24 thereafter, the Secretary shall—

1 (A) make publicly available on the website
2 of the Department a report, to be entitled the
3 “U.S. Energy and Employment Report”, de-
4 scribing the employment figures and demo-
5 graphics in the energy, energy efficiency, and
6 motor vehicle sectors of the United States based
7 on the survey and analysis conducted under
8 subsection (b); and

9 (B) subject to the requirements of sub-
10 chapter III of chapter 35 of title 44, United
11 States Code, make the data collected by the
12 Council publicly available on the website of the
13 Department.

14 (2) CONTENTS.—

15 (A) IN GENERAL.—The report under para-
16 graph (1) shall include employment figures and
17 demographic data for—

18 (i) the energy sector of the economy
19 of the United States, including—

20 (I) the electric power generation
21 and fuels sector; and

22 (II) the transmission, storage,
23 and distribution sector;

24 (ii) the energy efficiency sector of the
25 economy of the United States; and

1 (iii) the motor vehicle sector of the
2 economy of the United States.

3 (B) INCLUSION.—With respect to each sec-
4 tor described in subparagraph (A), the report
5 under paragraph (1) shall include employment
6 figures and demographic data sorted by—

7 (i) each technology, subtechnology,
8 and fuel type of those sectors; and

9 (ii) subject to the requirements of the
10 Confidential Information Protection and
11 Statistical Efficiency Act of 2002 (44
12 U.S.C. 3501 note; Public Law 107–347)—

13 (I) each State;

14 (II) each territory of the United
15 States;

16 (III) the District of Columbia;
17 and

18 (IV) each county (or equivalent
19 jurisdiction) in the United States.

20 **SEC. 5404. ASSISTING FEDERAL FACILITIES WITH ENERGY**
21 **CONSERVATION TECHNOLOGIES GRANT PRO-**
22 **GRAM.**

23 In addition to amounts otherwise made available,
24 there is appropriated to the Secretary, out of any amounts
25 in the Treasury not otherwise appropriated, to provide

1 grants authorized under section 546(b) of the National
2 Energy Conservation Policy Act (42 U.S.C. 8256(b)),
3 \$250,000,000 for fiscal year 2022, to remain available
4 until expended.

5 **SEC. 5405. REBATES.**

6 In addition to amounts otherwise made available,
7 there is appropriated to the Secretary, out of any amounts
8 in the Treasury not otherwise appropriated, for each of
9 fiscal years 2022 and 2023—

10 (1) \$5,000,000 for the extended product system
11 rebate program authorized under section 1005 of the
12 Energy Act of 2020 (42 U.S.C. 6311 note; Public
13 Law 116–260); and

14 (2) \$5,000,000 for the energy efficient trans-
15 former rebate program authorized under section
16 1006 of the Energy Act of 2020 (42 U.S.C. 6317
17 note; Public Law 116–260).

18 **SEC. 5406. MODEL GUIDANCE FOR COMBINED HEAT AND**
19 **POWER SYSTEMS AND WASTE HEAT TO**
20 **POWER SYSTEMS.**

21 (a) DEFINITIONS.—In this section:

22 (1) ADDITIONAL SERVICES.—The term “addi-
23 tional services” means the provision of supple-
24 mentary power, backup or standby power, mainte-

1 nance power, or interruptible power to an electric
2 consumer by an electric utility.

3 (2) WASTE HEAT TO POWER SYSTEM.—

4 (A) IN GENERAL.—The term “waste heat
5 to power system” means a system that gen-
6 erates electricity through the recovery of waste
7 energy.

8 (B) EXCLUSION.—The term “waste heat
9 to power system” does not include a system
10 that generates electricity through the recovery
11 of a heat resource from a process the primary
12 purpose of which is the generation of electricity
13 using a fossil fuel.

14 (3) OTHER TERMS.—

15 (A) PURPA.—The terms “electric con-
16 sumer”, “electric utility”, “interconnection
17 service”, “nonregulated electric utility”, and
18 “State regulatory authority” have the meanings
19 given those terms in the Public Utility Regu-
20 latory Policies Act of 1978 (16 U.S.C. 2601 et
21 seq.), within the meaning of title I of that Act
22 (16 U.S.C. 2611 et seq.).

23 (B) EPCA.—The terms “combined heat
24 and power system” and “waste energy” have
25 the meanings given those terms in section 371

1 of the Energy Policy and Conservation Act (42
2 U.S.C. 6341).

3 (b) REVIEW.—

4 (1) IN GENERAL.—Not later than 180 days
5 after the date of enactment of this Act, the Sec-
6 retary, in consultation with the Federal Energy Reg-
7 ulatory Commission and other appropriate entities,
8 shall review existing rules and procedures relating to
9 interconnection service and additional services
10 throughout the United States for electric generation
11 with nameplate capacity up to 20 megawatts to
12 identify barriers to the deployment of combined heat
13 and power systems and waste heat to power systems.

14 (2) INCLUSION.—The review under this sub-
15 section shall include a review of existing rules and
16 procedures relating to—

17 (A) determining and assigning costs of
18 interconnection service and additional services;
19 and

20 (B) ensuring adequate cost recovery by an
21 electric utility for interconnection service and
22 additional services.

23 (c) MODEL GUIDANCE.—

24 (1) IN GENERAL.—Not later than 18 months
25 after the date of enactment of this Act, the Sec-

1 retary, in consultation with the Federal Energy Reg-
2 ulatory Commission and other appropriate entities,
3 shall issue model guidance for interconnection serv-
4 ice and additional services for consideration by State
5 regulatory authorities and nonregulated electric utili-
6 ties to reduce the barriers identified under sub-
7 section (b)(1).

8 (2) CURRENT BEST PRACTICES.—The model
9 guidance issued under this subsection shall reflect,
10 to the maximum extent practicable, current best
11 practices to encourage the deployment of combined
12 heat and power systems and waste heat to power
13 systems while ensuring the safety and reliability of
14 the interconnected units and the distribution and
15 transmission networks to which the units connect,
16 including—

17 (A) relevant current standards developed
18 by the Institute of Electrical and Electronic En-
19 gineers; and

20 (B) model codes and rules adopted by—

21 (i) States; or

22 (ii) associations of State regulatory
23 agencies.

1 (3) FACTORS FOR CONSIDERATION.—In estab-
2 lishing the model guidance under this subsection, the
3 Secretary shall take into consideration—

4 (A) the appropriateness of using standards
5 or procedures for interconnection service that
6 vary based on unit size, fuel type, or other rel-
7 evant characteristics;

8 (B) the appropriateness of establishing
9 fast-track procedures for interconnection serv-
10 ice;

11 (C) the value of consistency with Federal
12 interconnection rules established by the Federal
13 Energy Regulatory Commission as of the date
14 of enactment of this Act;

15 (D) the best practices used to model out-
16 age assumptions and contingencies to determine
17 fees or rates for additional services;

18 (E) the appropriate duration, magnitude,
19 or usage of demand charge ratchets;

20 (F) potential alternative arrangements
21 with respect to the procurement of additional
22 services, including—

23 (i) contracts tailored to individual
24 electric consumers for additional services;

1 (ii) procurement of additional services
2 by an electric utility from a competitive
3 market; and

4 (iii) waivers of fees or rates for addi-
5 tional services for small electric consumers;
6 and

7 (G) outcomes such as increased electric re-
8 liability, fuel diversification, enhanced power
9 quality, and reduced electric losses that may re-
10 sult from increased use of combined heat and
11 power systems and waste heat to power sys-
12 tems.

13 **TITLE VI—METHANE**
14 **REDUCTION INFRASTRUCTURE**

15 **SEC. 6001. ORPHANED WELL SITE PLUGGING, REMEDI-**
16 **ATION, AND RESTORATION.**

17 Section 349 of the Energy Policy Act of 2005 (42
18 U.S.C. 15907) is amended to read as follows:

19 **“SEC. 349. ORPHANED WELL SITE PLUGGING, REMEDI-**
20 **ATION, AND RESTORATION.**

21 “(a) DEFINITIONS.—In this section:

22 “(1) FEDERAL LAND.—The term ‘Federal land’
23 means land administered by a land management
24 agency within—

25 “(A) the Department of Agriculture; or

1 “(B) the Department of the Interior.

2 “(2) IDLED WELL.—The term ‘idled well’
3 means a well—

4 “(A) that has been nonoperational for not
5 fewer than 4 years; and

6 “(B) for which there is no anticipated ben-
7 efitial future use.

8 “(3) INDIAN TRIBE.—The term ‘Indian Tribe’
9 has the meaning given the term in section 4 of the
10 Indian Self-Determination and Education Assistance
11 Act (25 U.S.C. 5304).

12 “(4) OPERATOR.—The term ‘operator’, with re-
13 spect to an oil or gas operation, means any entity,
14 including a lessee or operating rights owner, that
15 has provided to a relevant authority a written state-
16 ment that the entity is responsible for the oil or gas
17 operation, or any portion of the operation.

18 “(5) ORPHANED WELL.—The term ‘orphaned
19 well’—

20 “(A) with respect to Federal land or Tribal
21 land, means a well—

22 “(i) that is not used for an authorized
23 purpose, such as production, injection, or
24 monitoring; and

1 “(ii)(I) for which no operator can be
2 located; or

3 “(II) the operator of which is un-
4 able—

5 “(aa) to plug the well; and

6 “(bb) to remediate and reclaim
7 the well site; and

8 “(B) with respect to State or private
9 land—

10 “(i) has the meaning given the term
11 by the applicable State; or

12 “(ii) if that State uses different termi-
13 nology, has the meaning given another
14 term used by the State to describe a well
15 eligible for plugging, remediation, and rec-
16 lamation by the State.

17 “(6) TRIBAL LAND.—The term ‘Tribal land’
18 means any land or interest in land owned by an In-
19 dian Tribe, the title to which is—

20 “(A) held in trust by the United States; or

21 “(B) subject to a restriction against alien-
22 ation under Federal law.

23 “(b) FEDERAL PROGRAM.—

24 “(1) ESTABLISHMENT.—Not later than 60 days
25 after the date of enactment of the Energy Infra-

1 structure Act, the Secretary shall establish a pro-
2 gram to plug, remediate, and reclaim orphaned wells
3 located on Federal land.

4 “(2) INCLUDED ACTIVITIES.—The program
5 under this subsection shall—

6 “(A) include a method of—

7 “(i) identifying, characterizing, and
8 inventorying orphaned wells and associated
9 pipelines, facilities, and infrastructure on
10 Federal land; and

11 “(ii) ranking those orphaned wells for
12 priority in plugging, remediation, and rec-
13 lamation, based on—

14 “(I) public health and safety;

15 “(II) potential environmental
16 harm; and

17 “(III) other subsurface impacts
18 or land use priorities;

19 “(B) distribute funding in accordance with
20 the priorities established under subparagraph
21 (A)(ii) for—

22 “(i) plugging orphaned wells;

23 “(ii) remediating and reclaiming well
24 pads and facilities associated with or-
25 phaned wells;

1 “(iii) remediating soil and restoring
2 native species habitat that has been de-
3 graded due to the presence of orphaned
4 wells and associated pipelines, facilities,
5 and infrastructure; and

6 “(iv) remediating land adjacent to or-
7 phaned wells and decommissioning or re-
8 moving associated pipelines, facilities, and
9 infrastructure;

10 “(C) provide a public accounting of the
11 costs of plugging, remediation, and reclamation
12 for each orphaned well;

13 “(D) seek to determine the identities of po-
14 tentially responsible parties associated with the
15 orphaned well (or a surety or guarantor of such
16 a party), to the extent such information can be
17 ascertained, and make efforts to obtain reim-
18 bursement for expenditures to the extent prac-
19 ticable;

20 “(E) measure and track—

21 “(i) emissions of methane and other
22 gases associated with orphaned wells; and

23 “(ii) contamination of groundwater or
24 surface water associated with orphaned
25 wells; and

1 “(F) identify and address any dispropor-
2 tionate burden of adverse human health or envi-
3 ronmental effects of orphaned wells on commu-
4 nities of color, low-income communities, and
5 Tribal and indigenous communities.

6 “(3) IDLED WELLS.—The Secretary, acting
7 through the Director of the Bureau of Land Man-
8 agement, shall—

9 “(A) periodically review all idled wells on
10 Federal land; and

11 “(B) reduce the inventory of idled wells on
12 Federal land.

13 “(4) COOPERATION AND CONSULTATION.—In
14 carrying out the program under this subsection, the
15 Secretary shall—

16 “(A) work cooperatively with—

17 “(i) the Secretary of Agriculture;

18 “(ii) affected Indian Tribes; and

19 “(iii) each State within which Federal
20 land is located; and

21 “(B) consult with—

22 “(i) the Secretary of Energy; and

23 “(ii) the Interstate Oil and Gas Com-
24 pact Commission.

25 “(c) FUNDING FOR STATE PROGRAMS.—

1 “(1) IN GENERAL.—The Secretary shall provide
2 to States, in accordance with this subsection—

3 “(A) initial grants under paragraph (3);

4 “(B) formula grants under paragraph (4);

5 and

6 “(C) performance grants under paragraph
7 (5).

8 “(2) ACTIVITIES.—

9 “(A) IN GENERAL.—A State may use
10 funding provided under this subsection for any
11 of the following purposes:

12 “(i) To plug, remediate, and reclaim
13 orphaned wells located on State-owned or
14 privately owned land.

15 “(ii) To identify and characterize un-
16 documented orphaned wells on State and
17 private land.

18 “(iii) To rank orphaned wells based
19 on factors including—

20 “(I) public health and safety;

21 “(II) potential environmental
22 harm; and

23 “(III) other land use priorities.

1 “(iv) To make information regarding
2 the use of funds received under this sub-
3 section available on a public website.

4 “(v) To measure and track—

5 “(I) emissions of methane and
6 other gases associated with orphaned
7 wells; and

8 “(II) contamination of ground-
9 water or surface water associated with
10 orphaned wells.

11 “(vi) To remediate soil and restore
12 native species habitat that has been de-
13 graded due to the presence of orphaned
14 wells and associated pipelines, facilities,
15 and infrastructure.

16 “(vii) To remediate land adjacent to
17 orphaned wells and decommission or re-
18 move associated pipelines, facilities, and in-
19 frastructure.

20 “(viii) To identify and address any
21 disproportionate burden of adverse human
22 health or environmental effects of or-
23 phaned wells on communities of color, low-
24 income communities, and Tribal and indig-
25 enous communities.

1 “(ix) Subject to subparagraph (B), to
2 administer a program to carry out any ac-
3 tivities described in clauses (i) through
4 (viii).

5 “(B) ADMINISTRATIVE COST LIMITA-
6 TION.—

7 “(i) IN GENERAL.—Except as pro-
8 vided in clause (ii), a State shall not use
9 more than 10 percent of the funds received
10 under this subsection during a fiscal year
11 for administrative costs under subpara-
12 graph (A)(ix).

13 “(ii) EXCEPTION.—The limitation
14 under clause (i) shall not apply to funds
15 used by a State as described in paragraph
16 (3)(A)(ii).

17 “(3) INITIAL GRANTS.—

18 “(A) IN GENERAL.—The Secretary shall
19 distribute—

20 “(i) not more than \$25,000,000 to
21 each State that submits to the Secretary,
22 by not later than 180 days after the date
23 of enactment of Energy Infrastructure Act,
24 a request for funding under this clause, in-
25 cluding—

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1 “(I) an estimate of the number
2 of jobs that will be created or saved
3 through the activities proposed to be
4 funded; and

5 “(II) a certification that—

6 “(aa) the State is a Member
7 State or Associate Member State
8 of the Interstate Oil and Gas
9 Compact Commission;

10 “(bb) there are 1 or more
11 documented orphaned wells lo-
12 cated in the State; and

13 “(cc) the State will use not
14 less than 90 percent of the fund-
15 ing requested under this sub-
16 section to issue new contracts,
17 amend existing contracts, or
18 issue grants for plugging, remedi-
19 ation, and reclamation work by
20 not later than 90 days after the
21 date of receipt of the funds; and

22 “(ii) not more than \$5,000,000 to
23 each State that—

24 “(I) requests funding under this
25 clause;

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1 “(II) does not receive a grant
2 under clause (i); and

3 “(III) certifies to the Secretary
4 that—

5 “(aa) the State—

6 “(AA) has in effect a
7 plugging, remediation, and
8 reclamation program for or-
9 phaned wells; or

10 “(BB) the capacity to
11 initiate such a program; or

12 “(bb) the funds provided
13 under this paragraph will be used
14 to carry out any administrative
15 actions necessary to develop an
16 application for a formula grant
17 under paragraph (4) or a per-
18 formance grant under paragraph
19 (5).

20 “(B) DISTRIBUTION.—The Secretary shall
21 distribute funds to a State under this para-
22 graph by not later than the date that is 30 days
23 after the date on which the State submits to
24 the Secretary the certification required under

1 clause (i)(II) or (ii)(III) of subparagraph (A),
2 as applicable.

3 “(C) DEADLINE FOR EXPENDITURE.—A
4 State that receives funds under this paragraph
5 shall reimburse the Secretary in an amount
6 equal to the amount of the funds that remain
7 unobligated on the date that is 1 year after the
8 date of receipt of the funds.

9 “(D) REPORT.—Not later than 15 months
10 after the date on which a State receives funds
11 under this paragraph, the State shall submit to
12 the Secretary a report that describes the means
13 by which the State used the funds in accord-
14 ance with the certification submitted by the
15 State under subparagraph (A).

16 “(4) FORMULA GRANTS.—

17 “(A) ESTABLISHMENT.—

18 “(i) IN GENERAL.—The Secretary
19 shall establish a formula for the distribu-
20 tion to each State described in clause (ii)
21 of funds under this paragraph.

22 “(ii) DESCRIPTION OF STATES.—A
23 State referred to in clause (i) is a State
24 that, by not later than 45 days after the
25 date of enactment of the Energy Infra-

1 structure Act, submits to the Secretary a
2 notice of the intent of the State to submit
3 an application under subparagraph (B), in-
4 cluding a description of the factors de-
5 scribed in clause (iii) with respect to the
6 State.

7 “(iii) FACTORS.—The formula estab-
8 lished under clause (i) shall account for,
9 with respect to an applicant State, the fol-
10 lowing factors:

11 “(I) Job losses in the oil and gas
12 industry in the State during the pe-
13 riod—

14 “(aa) beginning on March 1,
15 2020; and

16 “(bb) ending on the date of
17 enactment of the Energy Infra-
18 structure Act.

19 “(II) The number of documented
20 orphaned wells located in the State,
21 and the projected cost—

22 “(aa) to plug or reclaim
23 those orphaned wells;

24 “(bb) to reclaim adjacent
25 land; and

1 “(II) the activities to be carried
2 out with the grant, including an iden-
3 tification of the estimated health,
4 safety, habitat, and environmental
5 benefits of plugging, remediating, or
6 reclaiming orphaned wells; and

7 “(III) the means by which the in-
8 formation regarding the activities of
9 the State under this paragraph will be
10 made available on a public website;

11 “(ii) an estimate of—

12 “(I) the number of orphaned
13 wells in the State that will be plugged,
14 remediated, or reclaimed;

15 “(II) the projected cost of—

16 “(aa) plugging, remediating,
17 or reclaiming orphaned wells;

18 “(bb) remediating or re-
19 claiming adjacent land; and

20 “(cc) decommissioning or re-
21 moving associated pipelines, fa-
22 cilities, and infrastructure;

23 “(III) the amount of that pro-
24 jected cost that will be offset by the
25 forfeiture of financial assurance in-

1 instruments, the estimated salvage of
2 well site equipment, or other proceeds
3 from the orphaned wells and adjacent
4 land;

5 “(IV) the number of jobs that
6 will be created or saved through the
7 activities to be funded under this
8 paragraph; and

9 “(V) the amount of funds to be
10 spent on administrative costs;

11 “(iii) a certification that any financial
12 assurance instruments available to cover
13 plugging, remediation, or reclamation costs
14 will be used by the State; and

15 “(iv) the definitions and processes
16 used by the State to formally identify a
17 well as—

18 “(I) an orphaned well; or

19 “(II) if the State uses different
20 terminology, otherwise eligible for
21 plugging, remediation, and reclama-
22 tion by the State.

23 “(C) DISTRIBUTION.—The Secretary shall
24 distribute funds to a State under this para-
25 graph by not later than the date that is 60 days

1 after the date on which the State submits to
2 the Secretary a completed application under
3 subparagraph (B).

4 “(D) DEADLINE FOR EXPENDITURE.—A
5 State that receives funds under this paragraph
6 shall reimburse the Secretary in an amount
7 equal to the amount of the funds that remain
8 unobligated on the date that is 5 years after the
9 date of receipt of the funds.

10 “(E) CONSULTATION.—In making a deter-
11 mination under this paragraph regarding the
12 eligibility of a State to receive a formula grant,
13 the Secretary shall consult with—

14 “(i) the Administrator of the Environ-
15 mental Protection Agency;

16 “(ii) the Secretary of Energy; and

17 “(iii) the Interstate Oil and Gas Com-
18 pact Commission.

19 “(5) PERFORMANCE GRANTS.—

20 “(A) ESTABLISHMENT.—The Secretary
21 shall provide to States, in accordance with this
22 paragraph—

23 “(i) regulatory improvement grants
24 under subparagraph (E); and

1 “(ii) matching grants under subpara-
2 graph (F).

3 “(B) APPLICATION.—To be eligible to re-
4 ceive a grant under this paragraph, a State
5 shall submit to the Secretary an application in-
6 cluding—

7 “(i) each element described in an ap-
8 plication for a grant under paragraph
9 (4)(B);

10 “(ii) activities carried out by the State
11 to address orphaned wells located in the
12 State, including—

13 “(I) increasing State spending on
14 well plugging, remediation, and rec-
15 lamation; or

16 “(II) improving regulation of oil
17 and gas wells; and

18 “(iii) the means by which the State
19 will use funds provided under this para-
20 graph—

21 “(I) to lower unemployment in
22 the State; and

23 “(II) to improve economic condi-
24 tions in economically distressed areas
25 of the State.

1 “(C) DISTRIBUTION.—The Secretary shall
2 distribute funds to a State under this para-
3 graph by not later than the date that is 60 days
4 after the date on which the State submits to
5 the Secretary a completed application under
6 subparagraph (B).

7 “(D) CONSULTATION.—In making a deter-
8 mination under this paragraph regarding the
9 eligibility of a State to receive a grant under
10 subparagraph (E) or (F), the Secretary shall
11 consult with—

12 “(i) the Administrator of the Environ-
13 mental Protection Agency;

14 “(ii) the Secretary of Energy; and

15 “(iii) the Interstate Oil and Gas Com-
16 pact Commission.

17 “(E) REGULATORY IMPROVEMENT
18 GRANTS.—

19 “(i) IN GENERAL.—Beginning on the
20 date that is 180 days after the date on
21 which an initial grant is provided to a
22 State under paragraph (3), the Secretary
23 shall provide to the State a regulatory im-
24 provement grant under this subparagraph,
25 if the State meets, during the 10-year pe-

1 riod ending on the date on which the State
2 submits to the Secretary an application
3 under subparagraph (B), 1 of the following
4 criteria:

5 “(I) The State has strengthened
6 plugging standards and procedures
7 designed to ensure that wells located
8 in the State are plugged in an effec-
9 tive manner that protects ground-
10 water and other natural resources,
11 public health and safety, and the envi-
12 ronment.

13 “(II) The State has made im-
14 provements to State programs de-
15 signed to reduce future orphaned well
16 burdens, such as financial assurance
17 reform, alternative funding mecha-
18 nisms for orphaned well programs,
19 and reforms to programs relating to
20 well transfer or temporary abandon-
21 ment.

22 “(ii) LIMITATIONS.—

23 “(I) NUMBER.—The Secretary
24 may issue to a State under this sub-
25 paragraph not more than 1 grant for

1 each criterion described in subclause
2 (I) or (II) of clause (i).

3 “(II) MAXIMUM AMOUNT.—The
4 amount of a single grant provided to
5 a State under this subparagraph shall
6 be not more than \$20,000,000.

7 “(iii) REIMBURSEMENT FOR FAILURE
8 TO MAINTAIN PROTECTIONS.—A State that
9 receives a grant under this subparagraph
10 shall reimburse the Secretary in an
11 amount equal to the amount of the grant
12 in any case in which, during the 10-year
13 period beginning on the date of receipt of
14 the grant, the State enacts a law or regula-
15 tion that, if in effect on the date of sub-
16 mission of the application under subpara-
17 graph (B), would have prevented the State
18 from being eligible to receive the grant
19 under clause (i).

20 “(F) MATCHING GRANTS.—

21 “(i) IN GENERAL.—Beginning on the
22 date that is 180 days after the date on
23 which an initial grant is provided to a
24 State under paragraph (3), the Secretary

1 shall provide to the State funding, in an
2 amount equal to the difference between—

3 “(I) the average annual amount
4 expended by the State during the pe-
5 riod of fiscal years 2010 through
6 2019—

7 “(aa) to plug, remediate,
8 and reclaim orphaned wells; and

9 “(bb) to decommission or re-
10 move associated pipelines, facili-
11 ties, or infrastructure; and

12 “(II) the amount that the State
13 certifies to the Secretary the State
14 will expend, during the fiscal year in
15 which the State will receive the grant
16 under this subparagraph—

17 “(aa) to plug, remediate,
18 and reclaim orphaned wells;

19 “(bb) to remediate or re-
20 claim adjacent land; and

21 “(cc) to decommission or re-
22 move associated pipelines, facili-
23 ties, and infrastructure.

24 “(ii) LIMITATIONS.—

1 “(I) FISCAL YEAR.—The Sec-
2 retary may issue to a State under this
3 subparagraph not more than 1 grant
4 for each fiscal year.

5 “(II) TOTAL FUNDS PRO-
6 VIDED.—The Secretary may provide
7 to a State under this subparagraph a
8 total amount equal to not more than
9 \$30,000,000 during the period of fis-
10 cal years 2022 through 2031.

11 “(d) TRIBAL ORPHANED WELL SITE PLUGGING, RE-
12 MEDIATION, AND RESTORATION.—

13 “(1) ESTABLISHMENT.—The Secretary shall es-
14 tablish in the Bureau of Indian Affairs a program
15 under which the Secretary shall provide to Indian
16 Tribes grants in accordance with this subsection.

17 “(2) ELIGIBLE ACTIVITIES.—

18 “(A) IN GENERAL.—An Indian Tribe may
19 use a grant received under this subsection—

20 “(i) to plug, remediate, or reclaim an
21 orphaned well on Tribal land of the Indian
22 Tribe;

23 “(ii) to remediate soil and restore na-
24 tive species habitat that has been degraded
25 due to the presence of an orphaned well or

1 associated pipelines, facilities, or infra-
2 structure on Tribal land;

3 “(iii) to remediate Tribal land adja-
4 cent to orphaned wells and decommission
5 or remove associated pipelines, facilities,
6 and infrastructure;

7 “(iv) to provide an online public ac-
8 counting of the cost of plugging, remedi-
9 ation, and reclamation for each orphaned
10 well site on Tribal land;

11 “(v) to identify and characterize un-
12 documented orphaned wells on Tribal land;
13 and

14 “(vi) to develop or administer a Tribal
15 program to carry out any activities de-
16 scribed in clauses (i) through (v).

17 “(B) ADMINISTRATIVE COST LIMITA-
18 TION.—

19 “(i) IN GENERAL.—Except as pro-
20 vided in clause (ii), an Indian Tribe shall
21 not use more than 10 percent of the funds
22 received under this subsection during a fis-
23 cal year for administrative costs under
24 subparagraph (A)(vi).

1 wells, procurement mechanisms, and other
2 program elements demonstrating the readi-
3 ness of the Indian Tribe to carry out the
4 proposed activities, or plans to develop
5 such a program; and

6 “(ii) the activities to be carried out
7 with the grant, including an identification
8 of the estimated health, safety, habitat,
9 and environmental benefits of plugging, re-
10 mediating, or reclaiming orphaned wells
11 and remediating or reclaiming adjacent
12 land; and

13 “(B) an estimate of—

14 “(i) the number of orphaned wells
15 that will be plugged, remediated, or re-
16 claimed; and

17 “(ii) the projected cost of—

18 “(I) plugging, remediating, or re-
19 claiming orphaned wells;

20 “(II) remediating or reclaiming
21 adjacent land; and

22 “(III) decommissioning or remov-
23 ing associated pipelines, facilities, and
24 infrastructure.

1 “(5) DISTRIBUTION.—The Secretary shall dis-
2 tribute funds to an Indian Tribe under this sub-
3 section by not later than the date that is 60 days
4 after the date on which the Indian Tribe submits to
5 the Secretary a completed application under para-
6 graph (4).

7 “(6) DEADLINE FOR EXPENDITURE.—An In-
8 dian Tribe that receives funds under this subsection
9 shall reimburse the Secretary in an amount equal to
10 the amount of the funds that remain unobligated on
11 the date that is 5 years after the date of receipt of
12 the funds.

13 “(7) DELEGATION TO SECRETARY.—

14 “(A) IN GENERAL.—An Indian Tribe on
15 the Tribal land of which is located an orphaned
16 well may submit to the Secretary a request for
17 the Secretary to administer and carry out plug-
18 ging, remediation, and reclamation activities re-
19 lating to the orphaned well on behalf of the In-
20 dian Tribe.

21 “(B) TREATMENT.—For the purposes of
22 subsection (b), an orphaned well with respect to
23 which an Indian Tribe of jurisdiction has sub-
24 mitted to the Secretary a request under sub-
25 paragraph (A) shall be considered to be located

1 on Federal land administered by a land man-
2 agement agency within the Department of the
3 Interior.

4 “(e) TECHNICAL ASSISTANCE.—The Secretary of
5 Energy, in cooperation with the Secretary and the Inter-
6 state Oil and Gas Compact Commission, shall provide
7 technical assistance to the Federal land management
8 agencies and oil and gas producing States and Indian
9 Tribes to support practical and economical remedies for
10 environmental problems caused by orphaned wells on Fed-
11 eral land, Tribal land, and State and private land, includ-
12 ing the sharing of best practices in the management of
13 oil and gas well inventories to ensure the availability of
14 funds to plug, remediate, and restore oil and gas well sites
15 on cessation of operation.

16 “(f) REPORT TO CONGRESS.—Not later than 1 year
17 after the date of enactment of the Energy Infrastructure
18 Act, and not less frequently than annually thereafter, the
19 Secretary shall submit to the Committees on Appropria-
20 tions and Energy and Natural Resources of the Senate
21 and the Committees on Appropriations and Natural Re-
22 sources of the House of Representatives a report describ-
23 ing the program established and grants awarded under
24 this section, including—

1 “(1) an updated inventory of wells located on
2 Federal land, Tribal land, and State and private
3 land that are—

4 “(A) orphaned wells; or

5 “(B) at risk of becoming orphaned wells;

6 “(2) an estimate of the quantities of—

7 “(A) methane and other gasses emitted
8 from orphaned wells; and

9 “(B) emissions reduced as a result of plug-
10 ging, remediating, and reclaiming orphaned
11 wells;

12 “(3) the number of jobs created and saved
13 through the plugging, remediation, and reclamation
14 of orphaned wells; and

15 “(4) the acreage of habitat restored using
16 grants awarded to plug, remediate, and reclaim or-
17 phaned wells and to remediate or reclaim adjacent
18 land, together with a description of the purposes for
19 which that land is likely to be used in the future.

20 “(g) EFFECT OF SECTION.—

21 “(1) NO EXPANSION OF LIABILITY.—Nothing in
22 this section establishes or expands the responsibility
23 or liability of any entity with respect to—

24 “(A) plugging any well; or

1 “(B) remediating or reclaiming any well
2 site.

3 “(2) TRIBAL LAND.—Nothing in this section—

4 “(A) relieves the Secretary of any obliga-
5 tion under section 3 of the Act of May 11, 1938
6 (25 U.S.C. 396c; 52 Stat. 348, chapter 198), to
7 plug, remediate, or reclaim an orphaned well lo-
8 cated on Tribal land; or

9 “(B) absolves the United States from a re-
10 sponsibility to plug, remediate, or reclaim an
11 orphaned well located on Tribal land or any
12 other responsibility to an Indian Tribe, includ-
13 ing any responsibility that derives from—

14 “(i) the trust relationship between the
15 United States and Indian Tribes;

16 “(ii) any treaty, law, or Executive
17 order; or

18 “(iii) any agreement between the
19 United States and an Indian Tribe.

20 “(3) OWNER OR OPERATOR NOT ABSOLVED.—

21 Nothing in this section absolves the owner or oper-
22 ator of an oil or gas well of any potential liability
23 for—

24 “(A) reimbursement of any plugging or
25 reclamation costs associated with the well; or

1 “(B) any adverse effect of the well on the
2 environment.

3 “(h) FUNDING.—

4 “(1) APPROPRIATIONS.—Out of any amounts in
5 the Treasury not otherwise appropriated, the Sec-
6 retary of the Treasury shall transfer the following
7 amounts, to remain available until September 30,
8 2030:

9 “(A) To the Secretary—

10 “(i) \$250,000,000 to carry out the
11 program under subsection (b);

12 “(ii) \$775,000,000 to provide grants
13 under subsection (c)(3);

14 “(iii) \$2,000,000,000 to provide
15 grants under subsection (c)(4);

16 “(iv) \$1,500,000,000 to provide
17 grants under subsection (c)(5); and

18 “(v) \$150,000,000 to carry out the
19 program under subsection (d).

20 “(B) To the Secretary of Energy,
21 \$30,000,000 to conduct research and develop-
22 ment activities in cooperation with the Inter-
23 state Oil and Gas Compact Commission to as-
24 sist the Federal land management agencies,
25 States, and Indian Tribes in—

1 “(i) identifying and characterizing un-
2 documented orphaned wells; and

3 “(ii) mitigating the environmental
4 risks of undocumented orphaned wells.

5 “(C) To the Interstate Oil and Gas Com-
6 pact Commission, \$2,000,000 to carry out this
7 section.

8 “(2) RECEIPT AND ACCEPTANCE.—The Sec-
9 retary, the Secretary of Energy, and the Interstate
10 Oil and Gas Compact Commission shall be entitled
11 to receive, shall accept, and shall use to carry out
12 this section the funds transferred under subpara-
13 graphs (A), (B), and (C), respectively, of paragraph
14 (1), without further appropriation.”.

15 **SEC. 6002. NEPA REVIEW OF CERTAIN PIPELINE PLACE-**
16 **MENT ACTIVITIES.**

17 Section 390 of the Energy Policy Act of 2005 (42
18 U.S.C. 15942) is amended—

19 (1) in subsection (b)(4), by striking “pipeline in
20 an approved” and inserting “pipeline, or a field or
21 a field compression or pumping unit associated with
22 a pipeline, in any existing disturbed area so long as
23 the disturbance was authorized and occurred within
24 the 5 years prior to the date of placement of the
25 pipeline, or in an existing or approved”; and

1 (2) by adding at the end the following:

2 “(c) EFFECT.—The presumption under subsection
3 (a) shall be considered to be rebutted if the Secretary of
4 the Interior or the Secretary of Agriculture, as applicable,
5 determines that extraordinary circumstances preclude the
6 use of such a categorical exclusion.”.

7 **TITLE VII—ABANDONED MINE**
8 **LAND RECLAMATION**

9 **SEC. 7001. ABANDONED MINE RECLAMATION FUND DIRECT**
10 **APPROPRIATIONS.**

11 (a) IN GENERAL.—In addition to amounts otherwise
12 made available, there is appropriated, for deposit into the
13 Abandoned Mine Reclamation Fund established by section
14 401(a) of the Surface Mining Control and Reclamation
15 Act of 1977 (30 U.S.C. 1231(a)), out of any amounts in
16 the Treasury not otherwise appropriated,
17 \$11,293,000,000 for fiscal year 2021, to remain available
18 until expended.

19 (b) USE OF FUNDS.—

20 (1) IN GENERAL.—Subject to subsection (f),
21 amounts appropriated under subsection (a) shall be
22 used to provide grants, as expeditiously as prac-
23 ticable but by not later than September 30, 2036, to
24 States and Indian Tribes described in paragraph (2)
25 for abandoned mine land and water reclamation

1 projects under the Surface Mining Control and Rec-
2 lamation Act of 1977 (30 U.S.C. 1201 et seq.).

3 (2) ELIGIBLE GRANT RECIPIENTS.—Grants
4 may be made under paragraph (1) to—

5 (A) States and Indian Tribes that have a
6 State or Tribal program approved under section
7 405 of the Surface Mining Control and Rec-
8 lamation Act of 1977 (30 U.S.C. 1235); and

9 (B) States and Indian Tribes that are re-
10 ferred to in section 402(g)(8)(B) of that Act
11 (30 U.S.C. 1232(g)(8)(B)).

12 (c) ALLOCATION.—Grant amounts under subsection
13 (b)(1) shall be allocated based on the proportion of
14 unreclaimed eligible land and water the State or Indian
15 Tribe has in the inventory maintained under section
16 403(c) of the Surface Mining Control and Reclamation
17 Act of 1977 (30 U.S.C. 1233(c)).

18 (d) TOTAL AMOUNT OF GRANT.—The total amount
19 of grant funding provided under subsection (b)(1) to an
20 eligible Indian Tribe shall be not less than \$20,000,000,
21 to the extent that the amount needed for reclamation
22 projects described in this paragraph on the land of the
23 Indian Tribe is not less than \$20,000,000.

24 (e) PRIORITY.—In addition to the priorities described
25 in section 403(a) of the Surface Mining Control and Rec-

1 lamation Act of 1977 (30 U.S.C. 1233(a)), in providing
2 grants under this section, priority may also be given to
3 reclamation projects described in subsection (b)(1) that
4 provide employment for former coal mine workers.

5 (f) RESERVATION.—Of the funds made available by
6 subsection (a), \$50,000,000 shall be made available to the
7 Secretary of the Interior to provide States and Indian
8 Tribes with the financial and technical assistance nec-
9 essary for the purpose of making amendments to the in-
10 ventory maintained under section 403(c) of the Surface
11 Mining Control and Reclamation Act of 1977 (30 U.S.C.
12 1233(c)).

13 **TITLE VIII—NATURAL RE-**
14 **SOURCES-RELATED INFRA-**
15 **STRUCTURE, WILDFIRE MAN-**
16 **AGEMENT, AND ECOSYSTEM**
17 **RESTORATION**

18 **SEC. 8001. FOREST SERVICE LEGACY ROAD AND TRAIL RE-**
19 **MEDIATION PROGRAM.**

20 Public Law 88–657 (16 U.S.C. 532 et seq.) (com-
21 monly known as the “Forest Roads and Trails Act”) is
22 amended by adding at the end the following:

1 **“SEC. 8. FOREST SERVICE LEGACY ROAD AND TRAIL REME-**
2 **DIATION PROGRAM.**

3 “(a) ESTABLISHMENT.—The Secretary shall estab-
4 lish the Forest Service Legacy Road and Trail Remedi-
5 ation Program (referred to in this section as the ‘Pro-
6 gram’).

7 “(b) ACTIVITIES.—In carrying out the Program, the
8 Secretary shall, taking into account foreseeable changes
9 in weather and hydrology—

10 “(1) restore passages for fish and other aquatic
11 species by removing, repairing, or replacing unnatu-
12 ral barriers from those passages;

13 “(2) decommission unauthorized user-created
14 roads and trails that are not a National Forest Sys-
15 tem road or a National Forest System trail;

16 “(3) prepare National Forest System roads for
17 long-term storage, in accordance with subsections
18 (c)(1) and (d), in a manner that—

19 “(A) prevents motor vehicle use;

20 “(B) prevents the roads from damaging
21 adjacent resources, including aquatic and wild-
22 life resources;

23 “(C) reduces or eliminates the need for
24 road maintenance; and

25 “(D) preserves the roads for future use;

1 “(4) decommission National Forest System
2 roads and trails in accordance with subsections
3 (c)(1) and (d);

4 “(5) relocate National Forest System roads and
5 trails to increase storm resilience; and

6 “(6) convert National Forest System roads to
7 National Forest System trails.

8 “(c) PROJECT SELECTION.—

9 “(1) PROJECT ELIGIBILITY.—

10 “(A) IN GENERAL.—The Secretary may
11 only fund under the Program a project de-
12 scribed in paragraph (3) or (4) of subsection
13 (b) if the Secretary previously and separately—

14 “(i) solicited public comment for
15 changing the management status of the
16 applicable National Forest System road or
17 trail—

18 “(I) to close the road or trail to
19 access; and

20 “(II) to minimize impacts to nat-
21 ural resources; and

22 “(ii) changed the management status
23 as described in clause (i).

24 “(B) REQUIREMENT.—Each project car-
25 ried out under the Program shall be on a Na-

1 tional Forest System road or trail, except with
2 respect to—

3 “(i) a project described in subsection
4 (b)(2); or

5 “(ii) a project carried out on a water-
6 shed for which the Secretary has entered
7 into a cooperative agreement under section
8 323 of the Department of the Interior and
9 Related Agencies Appropriations Act, 1999
10 (16 U.S.C. 1011a).

11 “(2) ANNUAL SELECTION OF PROJECTS FOR
12 FUNDING.—The Secretary shall—

13 “(A) establish a process for annually se-
14 lecting projects for funding under the Program,
15 consistent with the requirements of this section;

16 “(B) solicit and consider public input re-
17 gionally in the ranking of projects for funding
18 under the Program;

19 “(C) give priority for funding under the
20 Program to projects that would—

21 “(i) protect or improve water quality
22 in public drinking water source areas;

23 “(ii) restore the habitat of a threat-
24 ened, endangered, or sensitive fish or wild-
25 life species; or

1 “(iii) maintain future access to the
2 adjacent area for the public, contractors,
3 permittees, or firefighters; and

4 “(D) publish on the website of the Forest
5 Service—

6 “(i) the selection process established
7 under subparagraph (A); and

8 “(ii) a list that includes a description
9 and the proposed outcome of each project
10 funded under the Program in each fiscal
11 year.

12 “(d) IMPLEMENTATION.—In implementing the Pro-
13 gram, the Secretary shall ensure that the system of roads
14 and trails on the applicable unit of the National Forest
15 System—

16 “(1) is adequate to meet any increasing de-
17 mands for timber, recreation, and other uses;

18 “(2) provides for intensive use, protection, de-
19 velopment, and management of the land under prin-
20 ciples of multiple use and sustained yield of products
21 and services;

22 “(3) does not damage, degrade, or impair adja-
23 cent resources, including aquatic and wildlife re-
24 sources, to the extent practicable; and

25 “(4) reflects long-term funding expectations.

1 (2) identifications of reclaimed mine sites that
2 would be suitable for inclusion in such a program,
3 including sites on land that—

4 (A) is subject to title IV of the Surface
5 Mining Control and Reclamation Act of 1977
6 (30 U.S.C. 1231 et seq.); and

7 (B) is not subject to that title;

8 (3) a description of any barriers to implementa-
9 tion of such a program, including whether the pro-
10 gram would potentially interfere with the authorities
11 contained in, or the implementation of, the Surface
12 Mining Control and Reclamation Act of 1977 (30
13 U.S.C. 1201 et seq.), including the Abandoned Mine
14 Reclamation Fund created by section 401 of that
15 Act (30 U.S.C. 1231) and State reclamation pro-
16 grams under section 405 of that Act (30 U.S.C.
17 1235); and

18 (4) a description of the potential for job cre-
19 ation and workforce needs if such a program was
20 implemented.

21 **SEC. 8003. WILDFIRE RISK REDUCTION.**

22 (a) APPROPRIATIONS.—In addition to amounts other-
23 wise made available, there is appropriated to the Secretary
24 of the Interior and the Secretary of Agriculture, acting
25 through the Chief of the Forest Service, for the activities

1 described in subsection (c), out of any amounts in the
2 Treasury not otherwise appropriated, \$3,500,000,000.

3 (b) TREATMENT.—Of the 46,820,000 acres of Fed-
4 eral land or land held in trust for an Indian Tribe that
5 have been identified as having a very high wildfire hazard
6 potential, the Secretary of the Interior and the Secretary
7 of Agriculture, acting through the Chief of the Forest
8 Service, shall, by not later than September 30, 2027, con-
9 duct restoration treatments and change the Fire Regime
10 Condition Class of 10,000,000 acres that are located in—

11 (1) the wildland-urban interface; or

12 (2) a public drinking water source area.

13 (c) ACTIVITIES.—The amounts made available under
14 subsection (a) shall be expended in the following amounts
15 and for the following activities:

16 (1) \$100,000,000 for entering into an agree-
17 ment with the Director of the National Weather
18 Service to establish and operate a program that
19 makes use of the Geostationary Operational Envi-
20 ronmental Satellite Program to rapidly detect and
21 report wildfire starts in all areas in which the Sec-
22 retary of the Interior or the Secretary of Agriculture
23 has financial responsibility for wildland fire protec-
24 tion and prevention, of which—

1 (A) the Secretary of the Interior may ex-
2 pend \$50,000,000; and

3 (B) the Secretary of Agriculture may ex-
4 pend \$50,000,000.

5 (2) \$600,000,000 for the salaries and expenses
6 of Federal wildland firefighters in accordance with
7 subsection (d), of which—

8 (A) the Secretary of the Interior may ex-
9 pend \$120,000,000; and

10 (B) the Secretary of Agriculture may ex-
11 pend \$480,000,000.

12 (3) \$20,000,000 for the Secretary of the Inte-
13 rior to acquire technology and infrastructure for
14 each Type I and Type II incident management team
15 to maintain interoperability with respect to the radio
16 frequencies used by any responding agency.

17 (4) \$30,000,000 for the Secretary of Agri-
18 culture to provide financial assistance to States and
19 units of local government to establish and operate
20 Reverse-911 telecommunication systems.

21 (5) \$100,000,000 for the Secretary of the Inte-
22 rior to establish and implement a pilot program to
23 provide to local governments financial assistance for
24 the acquisition of slip-on tanker units to establish

1 fleets of vehicles that can be quickly converted to be
2 operated as fire engines.

3 (6) \$2,000,000 for the Secretary of Agriculture
4 to develop and publish, not later than 180 days after
5 the date of enactment of this Act, and every 5 years
6 thereafter, a map depicting at-risk communities (as
7 defined in section 101 of the Healthy Forests Res-
8 toration Act of 2003 (16 U.S.C. 6511)), including
9 Tribal at-risk communities.

10 (7) \$100,000,000 for pre-planning fire response
11 workshops that develop Potential Operational Delin-
12 eations and select potential control locations, of
13 which—

14 (A) the Secretary of the Interior may ex-
15 pend \$50,000,000; and

16 (B) the Secretary of Agriculture may ex-
17 pend \$50,000,000.

18 (8) \$20,000,000 for the Secretary of Agri-
19 culture to enter into an agreement with a Southwest
20 Ecological Restoration Institute established under
21 the Southwest Forest Health and Wildfire Preven-
22 tion Act of 2004 (16 U.S.C. 6701 et seq.)—

23 (A) to map each hazardous fuel reduction
24 or wildfire prevention treatment undertaken by

1 the Secretary of the Interior or the Secretary of
2 Agriculture;

3 (B) to map each wildfire that occurs in the
4 United States; and

5 (C) to publish a report every 5 years show-
6 ing the extent to which treatments described in
7 subparagraph (A) and previous wildfires affect
8 the boundaries of wildfires, categorized by—

- 9 (i) Federal land management agency;
10 (ii) region of the United States; and
11 (iii) treatment method.

12 (9) \$20,000,000 for research conducted under
13 the Joint Fire Science Program, of which—

14 (A) the Secretary of the Interior may ex-
15 pend \$10,000,000; and

16 (B) the Secretary of Agriculture may ex-
17 pend \$10,000,000.

18 (10) \$100,000,000 for the Secretary of Agri-
19 culture to implement the Collaborative Forest Land-
20 scape Restoration Program established under section
21 4003 of the Omnibus Public Land Management Act
22 of 2009 (16 U.S.C. 7303) in accordance with sub-
23 section (e).

24 (11) \$500,000,000 for conducting mechanical
25 thinning and timber harvesting in an ecologically ap-

1 appropriate manner that focuses, to the extent prac-
2 ticable, on small-diameter trees, of which—

3 (A) the Secretary of the Interior may ex-
4 pend \$100,000,000; and

5 (B) the Secretary of Agriculture may ex-
6 pend \$400,000,000.

7 (12) \$500,000,000 for the Secretary of Agri-
8 culture to award community wildfire defense grants
9 to at-risk communities in accordance with subsection
10 (f).

11 (13) \$500,000,000 for implementing prescribed
12 fires and related activities, of which—

13 (A) the Secretary of the Interior may ex-
14 pend \$250,000,000; and

15 (B) the Secretary of Agriculture may ex-
16 pend \$250,000,000.

17 (14) \$500,000,000 for developing or improving
18 potential control locations, in accordance with para-
19 graph (7), including installing fuelbreaks, with a
20 focus on shaded fuelbreaks when ecologically appro-
21 priate, of which—

22 (A) the Secretary of the Interior may ex-
23 pend \$250,000,000; and

24 (B) the Secretary of Agriculture may ex-
25 pend \$250,000,000.

1 (15) \$200,000,000 for contracting or employing
2 crews of laborers to modify and remove flammable
3 vegetation on Federal land and use the resulting
4 materials, to the extent practicable, to produce
5 biochar, including through the use of the Civilian
6 Climate Corps established pursuant to Executive
7 Order 14008 (86 Fed. Reg. 7619 (February 1,
8 2021); relating to tackling the climate crisis at home
9 and abroad), of which—

10 (A) the Secretary of the Interior may ex-
11 pend \$100,000,000; and

12 (B) the Secretary of Agriculture may ex-
13 pend \$100,000,000.

14 (16) \$200,000,000 for post-fire restoration ac-
15 tivities that are implemented not later than 3 years
16 after the date that a wildland fire is contained, of
17 which—

18 (A) the Secretary of the Interior may ex-
19 pend \$100,000,000; and

20 (B) the Secretary of Agriculture may ex-
21 pend \$100,000,000.

22 (17) \$8,000,000 for the Secretary of Agri-
23 culture—

24 (A) to provide feedstock to firewood banks;
25 and

1 (B) to provide financial assistance for the
2 operation of firewood banks.

3 (d) WILDLAND FIREFIGHTERS.—

4 (1) IN GENERAL.—Using the amounts made
5 available under subsection (c)(2), not later than 180
6 days after the date of enactment of this Act, the
7 Secretary of the Interior and the Secretary of Agri-
8 culture shall coordinate with the Director of the Of-
9 fice of Personnel Management to develop a distinct
10 “wildland fire manager” occupational series.

11 (2) HAZARDOUS DUTY DIFFERENTIAL NOT AF-
12 FECTED.—Section 5545(d)(1) of title 5, United
13 States Code, is amended by striking “except” and all
14 that follows through “and” at the end and inserting
15 the following: “except—

16 “(A) an employee in an occupational series
17 covering positions for which the primary duties
18 involve the prevention, control, suppression, or
19 management of wildland fires, as determined by
20 the Office; and

21 “(B) in such other circumstances as the
22 Office may by regulation prescribe; and”.

23 (3) CURRENT EMPLOYEES.—Any individual em-
24 ployed as a wildland firefighter on the date on which

1 the occupational series established under paragraph
2 (1) takes effect may elect—

3 (A) to remain in the occupational series in
4 which the individual is employed; or

5 (B) to be included in the “wildland fire
6 manager” occupational series established under
7 that paragraph.

8 (4) PERMANENT EMPLOYEES; INCREASE IN
9 SALARY.—Beginning October 1, 2021, the Secretary
10 of the Interior and the Secretary of Agriculture
11 shall—

12 (A) seek to convert not fewer than 1,000
13 seasonal wildland firefighters to wildland fire
14 managers that—

15 (i) are full-time, permanent, year-
16 round Federal employees; and

17 (ii) reduce hazardous fuels on Federal
18 land not fewer than 800 hours per year;

19 and

20 (B) increase the base salary of a Federal
21 wildland firefighter or wildland fire manager by
22 an amount that is commensurate with an in-
23 crease of \$20,000 per year, if—

1 (i) the hourly pay of the Federal em-
2 ployee is lower than the minimum wage of
3 the applicable State; or

4 (ii) the position is located in a loca-
5 tion where it is difficult to recruit or to re-
6 tain a wildland firefighter or wildland fire
7 manager.

8 (e) COLLABORATIVE FOREST LANDSCAPE RESTORA-
9 TION PROGRAM.—Using the amounts made available
10 under subsection (c)(10), not later than 180 days after
11 the date of enactment of this Act, the Secretary of Agri-
12 culture shall—

13 (1) solicit new project proposals under the Col-
14 laborative Forest Landscape Restoration Program
15 established under section 4003 of the Omnibus Pub-
16 lic Land Management Act of 2009 (16 U.S.C. 7303)
17 (referred to in this subsection as the “Program”);

18 (2) discontinue the funding of any proposal se-
19 lected for funding under the Program prior to Sep-
20 tember 30, 2018;

21 (3) select project proposals for funding under
22 the Program in a manner that—

23 (A) gives priority to a project proposal
24 that—

1 (i) will treat the most acres described
2 in subsection (b); and

3 (ii) contains the lowest cost per acre
4 to be treated;

5 (B) gives priority to a project proposal
6 that is proposed by a collaborative that has suc-
7 cessfully accomplished treatments, as proposed
8 in an earlier proposal funded under the Pro-
9 gram; and

10 (C) discontinues funding for a project that
11 fails to achieve the results included in a project
12 proposal submitted under paragraph (1) for
13 more than 2 consecutive years; and

14 (4) allow funding to be used to cover necessary
15 planning costs for projects included in project pro-
16 posals selected for funding under the Program.

17 (f) COMMUNITY WILDFIRE DEFENSE GRANT PRO-
18 GRAM.—

19 (1) ESTABLISHMENT.—Using the amounts
20 made available under subsection (c)(12), not later
21 than 180 days after the date of enactment of this
22 Act, the Secretary of Agriculture shall establish a
23 program, which shall be separate from the program
24 established under section 203 of the Robert T. Staf-
25 ford Disaster Relief and Emergency Assistance Act

1 (42 U.S.C. 5133), under which the Secretary of Ag-
2 riculture shall award grants to at-risk communities,
3 including Indian Tribes—

4 (A) to develop or revise a community wild-
5 fire protection plan; and

6 (B) to carry out projects described in a
7 community wildfire protection plan that is not
8 more than 10 years old.

9 (2) PRIORITY.—In awarding grants under the
10 program described in paragraph (1), the Secretary
11 of Agriculture shall give priority to an at-risk com-
12 munity that is—

13 (A) in an area identified by the Secretary
14 of Agriculture as having high or very high wild-
15 fire hazard potential;

16 (B) a low-income community; or

17 (C) a community impacted by a severe dis-
18 aster.

19 (3) COMMUNITY WILDFIRE DEFENSE
20 GRANTS.—

21 (A) GRANT AMOUNTS.—A grant—

22 (i) awarded under paragraph (1)(A)
23 shall be for not more than \$250,000; and

24 (ii) awarded under paragraph (1)(B)
25 shall be for not more than \$10,000,000.

1 (B) COST-SHARING REQUIREMENT.—The
2 non-Federal share of the cost (including the ad-
3 ministrative cost) of carrying out a project
4 using funds from a grant awarded under the
5 program described in paragraph (1) shall be—

6 (i) not less than 10 percent for a
7 grant awarded under paragraph (1)(A);

8 and

9 (ii) not less than 25 percent for a
10 grant awarded under paragraph (1)(B).

11 (g) FUNDING LIMITATIONS.—Section 10 of the Coop-
12 erative Forestry Assistance Act of 1978 (16 U.S.C. 2106)
13 is amended—

14 (1) in subsection (b)(3), by striking “rural
15 areas.” and all that follows through the end of the
16 paragraph and inserting “any city, town, or unincor-
17 porated area that has a population of not more than
18 10,000 inhabitants; and”;

19 (2) by redesignating subsections (c) through (g)
20 as subsections (d) through (h), respectively; and

21 (3) by inserting after subsection (b) the fol-
22 lowing:

23 “(c) ELIGIBILITY.—

24 “(1) IN GENERAL.—Notwithstanding the re-
25 quirements of section 2A, to be eligible for financial,

1 technical, or related assistance under any of para-
2 graphs (2) through (4) of subsection (b), a State
3 shall seek to improve the submission by the State of
4 fire data and information to the National Fire Inci-
5 dent Reporting System pursuant to section 9 of the
6 Federal Fire Prevention and Control Act of 1974
7 (15 U.S.C. 2208).

8 “(2) ROOFING REQUIREMENTS.—Notwith-
9 standing the requirements of section 2A, the Sec-
10 retary, a State Forester, or an equivalent State offi-
11 cial shall not disburse funds from the National Fire
12 Capacity account or the Rural Fire Capacity account
13 to an area or volunteer fire department that is lo-
14 cated in a county or community that has not adopt-
15 ed an ordinance or regulation that requires the con-
16 struction of new roofs on buildings to adhere to
17 standards that are similar to, or more stringent
18 than—

19 “(A) the roof construction standards estab-
20 lished by the National Fire Protection Associa-
21 tion; or

22 “(B) an applicable model building code es-
23 tablished by the International Code Council.

24 “(3) ASSISTANCE FOR RURAL COMMUNITIES.—

1 “(A) IN GENERAL.—The Secretary, a
2 State Forester, or an equivalent State official
3 shall only use funds in the Rural Fire Capacity
4 account to assist in providing apparatus to
5 rural communities with populations of not more
6 than 10,000 inhabitants.

7 “(B) FUNDING.—The Secretary may im-
8 plement this paragraph through the use of
9 funds from the Rural Fire Capacity account.”.

10 (h) EXPIRATION OF FUNDING.—Any funding made
11 available under this section that is not obligated by the
12 Secretary of the Interior or the Secretary of Agriculture
13 on the date that is 5 years after the date of enactment
14 of this Act shall be returned to the general fund of the
15 Treasury.

16 **SEC. 8004. ECOSYSTEM RESTORATION.**

17 (a) APPROPRIATIONS.—In addition to amounts other-
18 wise made available, there is appropriated to the Secretary
19 of the Interior and the Secretary of Agriculture, acting
20 through the Chief of the Forest Service, for the activities
21 described in subsection (b), out of any amounts in the
22 Treasury not otherwise appropriated, \$2,000,000,000.

23 (b) ACTIVITIES.—The amounts made available under
24 subsection (a) shall be expended in the following amounts
25 and for the following activities:

1 (1) \$200,000,000 for entering into contracts,
2 including stewardship contracts or agreements, each
3 of which is to restore the ecological health on not
4 fewer than 25,000 acres of Federal land, of which—

5 (A) the Secretary of the Interior may ex-
6 pend \$100,000,000; and

7 (B) the Secretary of Agriculture may ex-
8 pend \$100,000,000.

9 (2) \$200,000,000 to provide to States for im-
10 plementing restoration projects on Federal land pur-
11 suant to good neighbor agreements entered into
12 under section 8206 of the Agricultural Act of 2014
13 (16 U.S.C. 2113a), of which—

14 (A) the Secretary of the Interior may ex-
15 pend \$100,000,000; and

16 (B) the Secretary of Agriculture may ex-
17 pend \$100,000,000.

18 (3) \$500,000,000 for the Secretary of Agri-
19 culture to provide financial assistance to facilities
20 that purchase and process byproducts from eco-
21 system restoration projects in accordance with sub-
22 section (c).

23 (4) \$400,000,000 for the Secretary of the Inte-
24 rior to provide to States for implementing voluntary
25 ecosystem restoration projects, including stream res-

1 toration projects and pinyon-juniper removal
2 projects, on private or public land, using a distribu-
3 tion formula to be determined by the Secretary of
4 the Interior, in consultation with the Secretary of
5 Agriculture, that requires matching funding from a
6 State to be eligible to receive funding under this
7 paragraph.

8 (5) \$100,000,000 for the Secretary of Agri-
9 culture to award grants to States to establish rental
10 programs for portable skidder bridges to minimize
11 stream bed disturbance on non-Federal land and
12 Federal land.

13 (6) \$200,000,000 for invasive species detection,
14 prevention, and eradication, including conducting re-
15 search and providing resources to facilitate detection
16 of invasive species at points of entry and awarding
17 grants for eradication of invasive species on non-
18 Federal land and on Federal land, of which—

19 (A) the Secretary of the Interior may ex-
20 pend \$100,000,000; and

21 (B) the Secretary of Agriculture may ex-
22 pend \$100,000,000.

23 (7) \$100,000,000 to restore, prepare, or adapt
24 recreation sites on Federal land that have experi-
25 enced or may likely experience visitation and use be-

1 yond the current carrying capacity of the sites, of
2 which—

3 (A) the Secretary of the Interior may ex-
4 pend \$50,000,000; and

5 (B) the Secretary of Agriculture may ex-
6 pend \$50,000,000.

7 (8) \$200,000,000 to restore native vegetation
8 and mitigate environmental hazards on mined land
9 on Federal and non-Federal land, of which—

10 (A) the Secretary of the Interior may ex-
11 pend \$100,000,000; and

12 (B) the Secretary of Agriculture may ex-
13 pend \$100,000,000.

14 (9) \$100,000,000 for the Secretary of Agri-
15 culture, in coordination with the Secretary of the In-
16 terior, to establish a collaborative-based, landscape-
17 scale restoration program to restore water quality or
18 fish passage on Federal land in accordance with sub-
19 section (d).

20 (c) SAWMILL INFRASTRUCTURE.—The Secretary of
21 Agriculture, in coordination with the Secretary of the Inte-
22 rior, shall—

23 (1) develop a ranking system that categorizes
24 units of Federal land as being—

1 (A) very low priority for ecological restora-
2 tion involving vegetation removal;

3 (B) low priority for ecological restoration
4 involving vegetation removal;

5 (C) medium priority for ecological restora-
6 tion involving vegetation removal;

7 (D) high priority for ecological restoration
8 involving vegetation removal; or

9 (E) very high priority for ecological res-
10 toration involving vegetation removal;

11 (2) determine, for a unit identified under para-
12 graph (1) as being high or very high priority for eco-
13 logical restoration involving vegetation removal, if—

14 (A) a sawmill or other wood-processing fa-
15 cility exists in close proximity to the unit; and

16 (B) the presence of a sawmill or other
17 wood-processing facility would substantially de-
18 crease or does substantially decrease the cost of
19 conducting ecological restoration projects in-
20 volving vegetation removal;

21 (3) in accordance with any conditions the Sec-
22 retary of Agriculture determines to be necessary,
23 provide financial assistance, including a low-interest
24 loan or a loan guarantee, to an entity seeking to es-
25 tablish or improve a sawmill or other wood-proc-

1 essing facility in close proximity to a unit of Federal
2 land that has been identified under paragraph (1) as
3 high or very high priority for ecological restoration,
4 if the presence of a sawmill or other wood-processing
5 facility would substantially decrease or does substan-
6 tially decrease the cost of conducting ecological res-
7 toration projects involving vegetation removal on the
8 unit of Federal land, as determined under paragraph
9 (2)(B); and

10 (4) to the extent practicable, when allocating
11 funding to units of Federal land for ecological res-
12 toration projects involving vegetation removal, give
13 priority to a unit of Federal land that—

14 (A) has been identified under paragraph
15 (1) as being high or very high priority for eco-
16 logical restoration involving vegetation removal;
17 and

18 (B) has a sawmill or other wood-processing
19 facility—

20 (i) that, as determined under para-
21 graph (2)—

22 (I) exists in close proximity to
23 the unit; and

24 (II) does substantially decrease
25 the cost of conducting ecological res-

1 toration projects involving vegetation
2 removal on the unit; or
3 (ii) that has received financial assist-
4 ance under paragraph (3).

5 (d) COLLABORATIVE-BASED, AQUATIC-FOCUSED,
6 LANDSCAPE-SCALE RESTORATION PROGRAM.—Using the
7 amounts made available under subsection (b)(9), not later
8 than 180 days after the date of enactment of this Act,
9 the Secretary of Agriculture shall—

10 (1) solicit collaboratively developed proposals
11 that—

12 (A) are for 5-year projects to restore fish
13 passage or water quality on Federal land, in-
14 cluding land held in trust for an Indian Tribe;

15 (B) contain proposed accomplishments and
16 proposed non-Federal funding; and

17 (C) request not more than \$5,000,000 in
18 funding made available under subsection (b)(9);
19 and

20 (2) select project proposals for funding in a
21 manner that—

22 (A) gives priority to a project proposal that
23 would result in the most miles of streams being
24 restored for the lowest amount of Federal fund-
25 ing; and

1 (B) discontinues funding for a project that
2 fails to achieve the results included in a pro-
3 posal submitted under paragraph (1) for more
4 than 2 consecutive years.

5 (e) REPORT.—The Secretary of Agriculture shall
6 publish a list of—

7 (1) all of the priority watersheds on National
8 Forest System land;

9 (2) the condition of each priority watershed on
10 the date of enactment of this Act; and

11 (3) the condition of each priority watershed on
12 the date that is 5 years after the date of enactment
13 of this Act.

14 (f) EXPIRATION OF FUNDING.—Any funding made
15 available under this section that is not obligated by the
16 Secretary of the Interior or the Secretary of Agriculture
17 on the date that is 5 years after the date of enactment
18 of this Act shall be returned to the general fund of the
19 Treasury.

20 **TITLE IX—WESTERN WATER** 21 **INFRASTRUCTURE**

22 **SEC. 9001. WESTERN WATER INFRASTRUCTURE.**

23 (a) DEFINITIONS.—In this section:

24 (1) ELIGIBLE PROGRAM OR PROJECT.—The
25 term “eligible program or project” means—

1 (A) a water storage project authorized by
2 an Act of Congress;

3 (B) a regional rural water project author-
4 ized by an Act of Congress;

5 (C) a WaterSMART drought resiliency
6 project, water or energy efficiency grant, or co-
7 operative watershed management grant;

8 (D) a water recycling and reuse project au-
9 thorized under the Reclamation Wastewater
10 and Groundwater Study and Facilities Act (43
11 U.S.C. 390h et seq.); and

12 (E) a water desalination project.

13 (2) SECRETARY.—The term “Secretary” means
14 the Secretary of the Interior.

15 (b) APPROPRIATION.—In addition to amounts other-
16 wise made available, there is appropriated to the Sec-
17 retary, out of any amounts in the Treasury not otherwise
18 appropriated, \$5,000,000,000 for each of fiscal years
19 2022 through 2026, to be allocated among eligible pro-
20 grams and projects, as determined by the Secretary, con-
21 sistent with the cost share and authorization requirements
22 of the applicable eligible program or project.

1 **TITLE X—ENERGY ACT OF 2020**
2 **FUNDING**

3 **SEC. 10001. ENERGY STORAGE DEMONSTRATION**
4 **PROJECTS.**

5 (a) ENERGY STORAGE DEMONSTRATION PROJECTS;
6 PILOT GRANT PROGRAM.—In addition to amounts other-
7 wise made available, there is appropriated to the Secretary
8 to carry out activities under section 3201(e) of the Energy
9 Act of 2020 (42 U.S.C. 17232(e)), out of any amounts
10 in the Treasury not otherwise appropriated, \$71,000,000
11 for each of fiscal years 2021 through 2025.

12 (b) LONG-DURATION DEMONSTRATION INITIATIVE
13 AND JOINT PROGRAM.—In addition to amounts otherwise
14 made available, there is appropriated to the Secretary to
15 carry out activities under section 3201(d) of the Energy
16 Act of 2020 (42 U.S.C. 17232(d)), out of any amounts
17 in the Treasury not otherwise appropriated, \$30,000,000
18 for each of fiscal years 2021 through 2025.

19 **SEC. 10002. ADVANCED REACTOR DEMONSTRATION PRO-**
20 **GRAM.**

21 In addition to amounts otherwise made available,
22 there are appropriated to the Secretary to carry out activi-
23 ties under section 959A of the Energy Policy Act of 2005
24 (42 U.S.C. 16279a), out of any amounts in the Treasury
25 not otherwise appropriated—

- 1 (1) \$155,000,000 for fiscal year 2021;
- 2 (2) \$405,000,000 for fiscal year 2022;
- 3 (3) \$420,000,000 for fiscal year 2023;
- 4 (4) \$455,000,000 for fiscal year 2024; and
- 5 (5) \$455,000,000 for fiscal year 2025.

6 **SEC. 10003. MINERAL SECURITY PROJECTS.**

7 (a) NATIONAL GEOLOGICAL AND GEOPHYSICAL
8 DATA PRESERVATION PROGRAM.—In addition to amounts
9 otherwise made available, there is appropriated to the Sec-
10 retary of the Interior to carry out activities under section
11 351 of the Energy Policy Act of 2005 (42 U.S.C. 15908),
12 out of any amounts in the Treasury not otherwise appro-
13 priated—

- 14 (1) \$3,668,000 for fiscal year 2021; and
- 15 (2) \$5,000,000 for each of fiscal years 2022
16 through 2025.

17 (b) RARE EARTH MINERAL SECURITY.—In addition
18 to amounts otherwise made available, there is appro-
19 priated to the Secretary to carry out activities under sec-
20 tion 7001(a) of the Energy Act of 2020 (42 U.S.C.
21 13344(a)), out of any amounts in the Treasury not other-
22 wise appropriated, \$23,000,000 for each of fiscal years
23 2021 through 2025.

24 (c) CRITICAL MATERIAL INNOVATION, EFFICIENCY,
25 AND ALTERNATIVES.—In addition to amounts otherwise

1 made available, there is appropriated to the Secretary to
2 carry out activities under section 7002(g) of the Energy
3 Act of 2020 (30 U.S.C. 1606(g)), out of any amounts in
4 the Treasury not otherwise appropriated—

- 5 (1) \$125,000,000 for fiscal year 2021;
- 6 (2) \$105,000,000 for fiscal year 2022;
- 7 (3) \$100,000,000 for fiscal year 2023; and
- 8 (4) \$135,000,000 for each of fiscal years 2024
9 and 2025.

10 (d) **CRITICAL MATERIAL SUPPLY CHAIN RESEARCH**
11 **FACILITY.**—In addition to amounts otherwise made avail-
12 able, there is appropriated to the Secretary to carry out
13 activities under section 7002(h) of the Energy Act of 2020
14 (30 U.S.C. 1606(h)), out of any amounts in the Treasury
15 not otherwise appropriated—

- 16 (1) \$10,000,000 for fiscal year 2021;
- 17 (2) \$30,000,000 for fiscal year 2022; and
- 18 (3) \$35,000,000 for fiscal year 2023.

19 **SEC. 10004. CARBON CAPTURE DEMONSTRATION AND**
20 **PILOT PROGRAMS.**

21 (a) **CARBON CAPTURE LARGE-SCALE PILOT**
22 **PROJECTS.**—In addition to amounts otherwise made avail-
23 able, there are appropriated to the Secretary to carry out
24 activities under section 962(b)(2)(B) of the Energy Policy

1 Act of 2005 (42 U.S.C. 16292(b)(2)(B)), out of any
2 amounts in the Treasury not otherwise appropriated—

3 (1) \$162,000,000 for fiscal year 2021;

4 (2) \$225,000,000 for fiscal year 2022;

5 (3) \$200,000,000 for fiscal year 2023;

6 (4) \$200,000,000 for fiscal year 2024; and

7 (5) \$150,000,000 for fiscal year 2025.

8 (b) CARBON CAPTURE DEMONSTRATION PROJECTS
9 PROGRAM.—In addition to amounts otherwise made avail-
10 able, there are appropriated to the Secretary to carry out
11 activities under section 962(b)(2)(C) of the Energy Policy
12 Act of 2005 (42 U.S.C. 16292(b)(2)(C)), out of any
13 amounts in the Treasury not otherwise appropriated—

14 (1) \$437,000,000 for fiscal year 2021;

15 (2) \$500,000,000 for each of fiscal years 2022
16 through 2024; and

17 (3) \$600,000,000 for fiscal year 2025.

18 **SEC. 10005. DIRECT AIR CAPTURE TECHNOLOGIES PRIZE**

19 **COMPETITIONS.**

20 (a) PRECOMMERCIAL.—In addition to amounts other-
21 wise made available, there is appropriated to the Secretary
22 to carry out activities under section 969D(e)(2)(A) of the
23 Energy Policy Act of 2005 (42 U.S.C. 16298d(e)(2)(A)),
24 out of any amounts in the Treasury not otherwise appro-
25 priated, \$15,000,000 for fiscal year 2021

1 (b) COMMERCIAL.—In addition to amounts otherwise
2 made available, there is appropriated to the Secretary to
3 carry out activities under section 969D(e)(2)(B) of the
4 Energy Policy Act of 2005 (42 U.S.C. 16298d(e)(2)(B)),
5 out of any amounts in the Treasury not otherwise appro-
6 priated, \$100,000,000 for fiscal year 2021.

7 **SEC. 10006. WATER POWER PROJECTS.**

8 (a) HYDROPOWER AND MARINE ENERGY.—In addi-
9 tion to amounts otherwise made available, there are appro-
10 priated to the Secretary, out of any amounts in the Treas-
11 ury not otherwise appropriated—

12 (1) to carry out activities under section 634 of
13 the Energy Independence and Security Act of 2007
14 (42 U.S.C. 17213), \$36,000,000 for the period of
15 fiscal years 2021 through 2025; and

16 (2) to carry out activities under section 635 of
17 the Energy Independence and Security Act of 2007
18 (42 U.S.C. 17214), \$70,400,000 for the period of
19 fiscal years 2021 through 2025.

20 (b) NATIONAL MARINE ENERGY CENTERS.—In addi-
21 tion to amounts otherwise made available, there is appro-
22 priated to the Secretary to carry out activities under sec-
23 tion 636 of the Energy Independence and Security Act
24 of 2007 (42 U.S.C. 17215), out of any amounts in the

1 Treasury not otherwise appropriated, \$10,000,000 for
2 each of fiscal years 2022 through 2025.

3 (c) HYDROELECTRIC INCENTIVES.—In addition to
4 amounts otherwise made available, there is appropriated
5 to the Secretary to carry out activities under sections 242
6 and 243 of the Energy Policy Act of 2005 (42 U.S.C.
7 15881, 15882), out of any amounts in the Treasury not
8 otherwise appropriated, \$100,000,000 for the period of
9 fiscal years 2021 through 2025.

10 **SEC. 10007. RENEWABLE ENERGY PROJECTS.**

11 (a) GEOTHERMAL ENERGY.—In addition to amounts
12 otherwise made available, there is appropriated to the Sec-
13 retary to carry out activities under section 615 of the En-
14 ergy Independence and Security Act of 2007 (42 U.S.C.
15 17194), out of any amounts in the Treasury not otherwise
16 appropriated, \$84,000,000 for the period of fiscal years
17 2022 through 2025.

18 (b) WIND ENERGY.—In addition to amounts other-
19 wise made available, there are appropriated to the Sec-
20 retary, out of any amounts in the Treasury not otherwise
21 appropriated—

22 (1) to carry out activities under section
23 3003(b)(2) of the Energy Act of 2020 (42 U.S.C.
24 16237(b)(2)), \$60,000,000 for the period of fiscal
25 years 2022 through 2025; and

1 (2) to carry out activities under section
2 3003(b)(4) of the Energy Act of 2020 (42 U.S.C.
3 16237(b)(4)), \$40,000,000 for the period of fiscal
4 years 2022 through 2025.

5 (c) SOLAR ENERGY.—In addition to amounts other-
6 wise made available, there are appropriated to the Sec-
7 retary, out of any amounts in the Treasury not otherwise
8 appropriated—

9 (1) to carry out activities under section
10 3004(b)(2) of the Energy Act of 2020 (42 U.S.C.
11 16238(b)(2)), \$40,000,000 for the period of fiscal
12 years 2022 through 2025;

13 (2) to carry out activities under section
14 3004(b)(3) of the Energy Act of 2020 (42 U.S.C.
15 16238(b)(3)), \$20,000,000 for the period of fiscal
16 years 2022 through 2025; and

17 (3) to carry out activities under section
18 3004(b)(4) of the Energy Act of 2020 (42 U.S.C.
19 16238(b)(4)), \$20,000,000 for the period of fiscal
20 years 2022 through 2025.

21 **SEC. 10008. INDUSTRIAL EMISSIONS DEMONSTRATION**
22 **PROJECTS.**

23 In addition to amounts otherwise made available,
24 there are appropriated to the Secretary to carry out activi-
25 ties under section 454(d)(3) of the Energy Independence

1 and Security Act of 2007 (42 U.S.C. 17113(d)(3)), out
2 of any amounts in the Treasury not otherwise appro-
3 priated—

4 (1) \$20,000,000 for fiscal year 2022;

5 (2) \$30,000,000 for fiscal year 2023; and

6 (3) \$50,000,000 for each of fiscal years 2024
7 and 2025.

8 **SEC. 10009. AVAILABILITY OF AMOUNTS.**

9 Amounts made available by this title for fiscal year
10 2021 shall remain available until expended.

11 **TITLE XI—WAGE RATE**
12 **REQUIREMENTS**

13 **SEC. 11001. WAGE RATE REQUIREMENTS.**

14 (a) DAVIS-BACON.—Any laborer or mechanic em-
15 ployed by any contractor or subcontractor in the perform-
16 ance of work on a project funded under this Act shall be
17 paid wages at rates not less than those prevailing on simi-
18 lar projects in the locality as determined by the Secretary
19 of Labor under subchapter IV of chapter 31 of title 40,
20 United States Code (commonly referred to as the “Davis-
21 Bacon Act”).

22 (b) AUTHORITY.—With respect to the labor stand-
23 ards specified in subsection (a), the Secretary of Labor
24 shall have the authority and functions set forth in Reorga-
25 nization Plan Numbered 14 of 1950 (64 Stat. 1267; 5

- 1 U.S.C. App.) and section 3145 of title 40, United States
- 2 Code.