

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 INFRASTRUC-** 8 **TURE AND RESILIENCY**

9 **Subtitle A—Grid Infrastructure**

10 **Resilience and Reliability**

11 **SEC. 1001. PREVENTING OUTAGES AND ENHANCING THE** 12 **RESILIENCE OF THE ELECTRIC GRID.**

13 (a) DEFINITIONS.—In this section:

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

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

6 (3) ELIGIBLE PROJECT.—

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

11 (i) are not owned by the Federal Gov-
12 ernment;

13 (ii) are capable of transmitting elec-
14 tric energy of not less than—

15 (I) 1,000 megawatts; or

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

23 (iii) are not subject to all costs to con-
24 struct the project being recovered through
25 a Transmission Organization (as defined in

1 section 3 of the Federal Power Act (16
2 U.S.C. 796)); and

3 (iv)(I) are new electric power trans-
4 mission lines, including replacements of ex-
5 isting electric power transmission lines; or

6 (II) are significant upgrades that in-
7 crease the transmission capacity of an ex-
8 isting electric power transmission line.

9 (B) INCLUSION.—The term “eligible
10 project” includes the construction or upgrading
11 of related facilities.

12 (4) ENVIRONMENTAL REVIEW PROCESS.—The
13 term “environmental review process” means—

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

20 (B) any other process relating to the prep-
21 aration or completion of an environmental per-
22 mit, approval, review, or study required for an
23 eligible project under any other Federal law.

24 (5) FEDERAL LAND.—The term “Federal land”
25 means—

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

4 (B) National Forest System land.

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

8 (7) PROGRAM.—The term “program” means
9 the Transmission Facilitation Program established
10 by subsection (b).

11 (8) RELATED FACILITY.—

12 (A) IN GENERAL.—The term “related fa-
13 cility” means a facility related to an electric
14 power transmission line described in paragraph
15 (3)(A).

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

18 (i) facilities used primarily to generate
19 electric energy; or

20 (ii) facilities used in the local distribu-
21 tion of electric energy.

22 (9) SECRETARY.—The term “Secretary” means
23 the Secretary, acting through the Assistant Sec-
24 retary for the Office of Electricity.

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

6 (c) ADMINISTRATION.—The Secretary shall admin-
7 ister the program.

8 (d) APPLICATIONS.—

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

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

17 (e) FUNDING.—

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

22 (A) any amounts appropriated to the
23 Fund; and

24 (B) any amounts deposited in the Fund
25 under paragraph (2).

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

3 (A) all amounts received by the Secretary,
4 including receipts, collections, and recoveries,
5 from any source relating to expenses incurred
6 by the Secretary in carrying out the program,
7 including—

8 (i) costs recovered for a capacity con-
9 tract; and

10 (ii) amounts received as repayment of
11 a loan issued to an eligible entity under
12 subsection (f)(1)(B);

13 (B) all amounts borrowed from the Treas-
14 ury by the Secretary for the program under
15 paragraph (3); and

16 (C) any amounts appropriated to the Sec-
17 retary for the program.

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

21 (4) EXPENDITURES.—The amounts in the
22 Fund shall be available to the Secretary, without
23 further appropriation or fiscal year limitation, to
24 carry out the program.

25 (5) COST RECOVERY.—

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

6 (i) from eligible entities receiving the
7 benefit of the applicable facilitation activ-
8 ity; or

9 (ii) with respect to a contracted trans-
10 mission capacity under subsection
11 (f)(1)(A)—

12 (I) through rates charged to
13 third parties for the use of the con-
14 tracted transmission capacity; and

15 (II) on termination of the appli-
16 cable capacity contract under sub-
17 section (g)(6), from the applicable
18 third party or eligible entity, in ac-
19 cordance with that subsection.

20 (B) EXCEPTION.—

21 (i) IN GENERAL.—The Secretary may
22 terminate a capacity contract under sub-
23 section (g)(6) without recovering the out-
24 standing costs of facilitating the applicable
25 eligible project if the Secretary determines

1 that it is not feasible to recover those costs
2 prior to terminating the capacity contract,
3 as determined by the Secretary.

4 (ii) FORGIVENESS OF CERTAIN
5 AMOUNTS.—If the Secretary terminates a
6 capacity contract under clause (i), any
7 amounts borrowed by the Secretary from
8 the Treasury for the purpose of facilitating
9 the applicable eligible project—

10 (I) shall be forgiven; and

11 (II) shall not count toward the
12 limitation described in paragraph (3).

13 (6) REFINANCING.—The Secretary may refi-
14 nance loans made to the Secretary under paragraph
15 (3) within the Treasury.

16 (7) AUTHORIZATION OF APPROPRIATIONS.—
17 There is authorized to be appropriated to the Sec-
18 retary to carry out the program, including for any
19 administrative expenses of carrying out the program
20 that are not recovered under paragraph (5),
21 \$10,000,000 for each of fiscal years 2022 through
22 2026.

23 (f) FACILITATION OF ELIGIBLE PROJECTS.—

24 (1) IN GENERAL.—To facilitate eligible
25 projects, the Secretary may—

1 (A) subject to subsections (g) and (j),
2 enter into a capacity contract with respect to an
3 eligible project prior to the date on which the
4 eligible project is completed;

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

8 (C) provide technical assistance to an eligi-
9 ble entity with respect to an eligible project;
10 and

11 (D) notwithstanding any other provision of
12 law and subject to subsection (i), to the extent
13 that an eligible project is required to undergo
14 an environmental review process, including with
15 respect to any rights-of-way across Federal
16 land, establish the Department as the Federal
17 lead agency for that environmental review pro-
18 cess.

19 (2) REQUIREMENT.—The provision and receipt
20 of assistance for an eligible project under paragraph
21 (1) shall be subject to such terms and conditions as
22 the Secretary determines to be appropriate to ensure
23 the success of the program.

24 (g) CAPACITY CONTRACTS.—

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

6 (2) PAYMENT.—The amount paid by the Sec-
7 retary to an eligible entity under a capacity contract
8 for the right to the use of the transmission capacity
9 of an eligible project shall be—

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

16 (B) on a schedule and in such divided
17 amounts, including in a single amount, that the
18 Secretary determines are likely to facilitate con-
19 struction of the eligible project, taking into ac-
20 count standard industry practice and factors
21 specific to each applicant, including, as applica-
22 ble—

23 (i) potential review by a State regu-
24 latory entity of the revenue requirement of
25 an electric utility; and

1 (ii) the financial model of an inde-
2 pendent transmission developer.

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

4 (A) be for a term of not more than 40
5 years; and

6 (B) be for not more than 50 percent of the
7 total proposed transmission capacity of the ap-
8 plicable eligible project.

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

13 (5) TRANSMISSION MARKETING.—

14 (A) IN GENERAL.—If the Secretary has
15 not terminated a capacity contract under para-
16 graph (6) before the applicable eligible project
17 enters into service, the Secretary may enter into
18 1 or more contracts with a third party to mar-
19 ket the transmission capacity of the eligible
20 project to which the Secretary holds rights
21 under the capacity contract.

22 (B) RETURN.—The Secretary shall seek to
23 ensure that any contract entered into under
24 subparagraph (A) maximizes the financial re-
25 turn to the Federal Government.

1 (C) COMPETITIVE SOLICITATION.—The
2 Secretary shall only select third parties for con-
3 tracts under this paragraph through a competi-
4 tive solicitation.

5 (6) TERMINATION.—

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

14 (B) TRANSFER.—On payment to the Sec-
15 retary by a third party for transmission capac-
16 ity to which the Secretary has rights under a
17 capacity contract, the Secretary may transfer
18 the rights to that transmission capacity to that
19 third party.

20 (C) RELINQUISHMENT.—On payment to
21 the Secretary by the applicable eligible entity
22 for transmission capacity to which the Sec-
23 retary has rights under a capacity contract, the
24 Secretary may relinquish the rights to that
25 transmission capacity to the eligible entity.

1 (D) REQUIREMENT.—A payment under
2 subparagraph (B) or (C) shall be in an amount
3 sufficient for the Secretary to recover any re-
4 maining costs incurred by the Secretary with
5 respect to the quantity of transmission capacity
6 affected by the transfer under subparagraph
7 (B) or the relinquishment under subparagraph
8 (C), as applicable.

9 (7) OTHER FEDERAL CAPACITY POSITIONS.—
10 The existence of a capacity contract does not pre-
11 clude a Federal entity, including a Federal power
12 marketing administration, from otherwise securing
13 transmission capacity at any time from an eligible
14 project, to the extent that the Federal entity is au-
15 thorized to secure that transmission capacity.

16 (8) FORM OF FINANCIAL ASSISTANCE.—Enter-
17 ing into a capacity contract under subsection
18 (f)(1)(A) shall be considered a form of financial as-
19 sistance covered by section 1508.1(q)(1)(vii) of title
20 40, Code of Federal Regulations [(or successor reg-
21 ulations/as in effect on the date of enactment of this
22 Act)].

23 (h) INTEREST RATE ON LOANS.—The rate of interest
24 to be charged in connection with any loan made by the
25 Secretary to an eligible entity under subsection (f)(1)(B)

1 shall be fixed by the Secretary, taking into consideration
2 market yields on outstanding marketable obligations of the
3 United States of comparable maturities as of the date of
4 the loan.

5 (i) ENVIRONMENTAL REVIEW PROCESS.—

6 (1) JOINT LEAD AGENCIES.—Nothing in this
7 section precludes another Federal agency from being
8 a joint lead agency with the Department in accord-
9 ance with regulations promulgated under the Na-
10 tional Environmental Policy Act of 1969 (42 U.S.C.
11 4321 et seq.).

12 (2) EFFECT OF AUTHORITY.—Except as pro-
13 vided in subsection (g)(8), nothing in this section af-
14 fects or limits the application of, or any obligation
15 to comply with, any requirement of an environmental
16 law of the United States, including the National En-
17 vironmental Policy Act of 1969 (42 U.S.C. 4321 et
18 seq.).

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

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

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

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

11 (3) it is reasonable to expect that the proceeds
12 from the eligible project will be adequate, as applica-
13 ble—

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

16 (B) to repay a loan provided under sub-
17 section (f)(1)(B).

18 (k) OTHER AUTHORITIES, LIMITATIONS, AND EF-
19 FECTS.—

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

24 (2) OPERATIONS AND MAINTENANCE.—Facilita-
25 tion by the Secretary of an eligible project under

1 this section does not create any obligation on the
2 part of the Secretary to operate or maintain the eli-
3 gible project.

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

11 (A) each other eligible project; and

12 (B) all other Federal power and trans-
13 mission facilities.

14 (4) EFFECT ON ANCILLARY SERVICES AUTHOR-
15 ITY AND OBLIGATIONS.—Nothing in this section con-
16 fers on the Secretary or any Federal power mar-
17 keting administration any additional authority or ob-
18 ligation to provide ancillary services to users of
19 transmission facilities constructed or upgraded
20 under this section.

21 (5) EFFECT ON WESTERN AREA POWER ADMIN-
22 ISTRATION PROJECTS.—Nothing in this section af-
23 fects—

24 (A) any pending project application before
25 the Western Area Power Administration under

1 section 301 of the Hoover Power Plant Act of
2 1984 (42 U.S.C. 16421a); or

3 (B) any agreement entered into by the
4 Western Power Administration under that sec-
5 tion.

6 (6) THIRD-PARTY FINANCE.—Nothing in this
7 section precludes an eligible project facilitated under
8 this section from being eligible as a project under
9 section 1222 of the Energy Policy Act of 2005 (42
10 U.S.C. 16421).

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

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

14 (B) a Federal loan under section 301 of
15 the Hoover Power Plant Act of 1984 (42
16 U.S.C. 16421a).

17 (8) CONSIDERATIONS.—In evaluating eligible
18 projects for possible facilitation under this section,
19 the Secretary shall prioritize projects that, to the
20 maximum extent practicable—

21 (A) use technology that enhances the ca-
22 pacity, efficiency, or reliability of an electric
23 power transmission system, including hardware
24 or software that enables dynamic line ratings,

1 advanced power flow control, or grid topology
2 optimization;

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

5 (C) facilitate interregional transmission
6 projects that support strong and equitable eco-
7 nomic growth; and

8 (D) contribute to national or subnational
9 goals to lower electricity sector greenhouse gas
10 emissions.

11 **SEC. 1008. DEPLOYMENT OF TECHNOLOGIES TO ENHANCE**
12 **GRID FLEXIBILITY.**

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

16 (1) in subsection (b)—

17 (A) in the matter preceding paragraph (1),
18 by striking “the date of enactment of this Act”
19 and inserting “the date of enactment of the En-
20 ergy Infrastructure Act”;

21 (B) by redesignating paragraph (9) as
22 paragraph (13); and

23 (C) by inserting after paragraph (8) the
24 following:

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

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

7 “(11) In the case of utility communications,
8 operational fiber and wireless broadband commu-
9 nications networks to enable data flow between dis-
10 tribution system components.

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

15 (2) in subsection (d)—

16 (A) by redesignating paragraph (9) as
17 paragraph (13); and

18 (B) by inserting after paragraph (8) the
19 following:

20 “(9) The ability to use data analytics and soft-
21 ware-as-service to provide flexibility by improving
22 the visibility of the electrical system to grid opera-
23 tors that can help quickly rebalance the electrical
24 system with autonomous controls.

1 “(10) The ability to facilitate the aggregation
2 or integration of distributed energy resources to
3 serve as assets for the grid.

4 “(11) The ability to provide energy storage to
5 meet fluctuating electricity demand, provide voltage
6 support, and integrate intermittent generation
7 sources.

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

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

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

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

23 (1) in section 361—

1 (A) by striking the section designation and
2 heading and all that follows through “The Con-
3 gress” and inserting the following:

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

5 “(a) FINDINGS.—Congress”;

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

8 “(b) PURPOSE.—It is”; and

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

10 “(c) DEFINITIONS.—In this part.”;

11 (2) in section 366—

12 (A) in paragraph (3)(B)(i), by striking
13 “approved under section 367, and” ; and insert-
14 ing “; and”;

15 (B) in each of paragraphs (1) through (8),
16 by inserting a paragraph heading, the text of
17 which is comprised of the term defined in the
18 paragraph; and

19 (C) by redesignating paragraphs (6) and
20 (7) as paragraphs (7) and (6), respectively, and
21 moving the paragraphs so as to appear in nu-
22 merical order;

23 (3) by moving paragraphs (1) through (8) of
24 section 366 (as so redesignated) so as to appear

1 after subsection (c) of section 361 (as designated by
2 paragraph (1)(C)); and

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

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

5 “(a) DEFINITIONS.—In this section:

6 “(1) BULK-POWER SYSTEM.—The term ‘bulk-
7 power system’ has the meaning given the term in
8 section 215(a) of the Federal Power Act (16 U.S.C.
9 824o(a)).

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

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

18 “(1) assesses the existing circumstances in the
19 State; and

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

23 “(A) to secure the energy infrastructure of
24 the State against all physical and cybersecurity
25 threats;

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

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

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

7 “(c) CONTENTS OF PLAN.—A State energy security
8 plan shall—

9 “(1) address all energy sources and regulated
10 and unregulated energy providers;

11 “(2) provide a State energy profile, including
12 an assessment of energy production, transmission,
13 distribution, and end-use;

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

16 “(A) physical threats and vulnerabilities;
17 and

18 “(B) cybersecurity threats and
19 vulnerabilities;

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

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

24 “(6)(A) address—

1 “(i) multi-State and regional coordination,
2 planning, and response; and

3 “(ii) coordination with Indian Tribes with
4 respect to planning and response; and

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

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

10 “(1) the public utility or service commission of
11 the State;

12 “(2) energy providers from the private and pub-
13 lic sectors; and

14 “(3) other entities responsible for—

15 “(A) maintaining fuel or electric reliability;
16 and

17 “(B) securing energy infrastructure.

18 “(e) FINANCIAL ASSISTANCE.—A State is not eligible
19 to receive Federal financial assistance under this part for
20 any purpose for a fiscal year unless the Governor of the
21 State submits to the Secretary, with respect to that fiscal
22 year—

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

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

3 “(A) any necessary revisions to the State
4 energy security plan; or

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

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

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

18 “(1) to supplement, and not to supplant, State
19 and local funds; and

20 “(2) to the maximum extent practicable, to in-
21 crease the amount of State and local funds that oth-
22 erwise would be available, in the absence of the Fed-
23 eral financial assistance, for the implementation of a
24 State energy security plan.

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

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

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

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

17 (b) CLERICAL AMENDMENTS.—The table of contents
18 of the Energy Policy and Conservation Act (Public Law
19 94–163; 89 Stat. 872) is amended—

20 (1) by striking the item relating to section 361
21 and inserting the following:

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

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

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

24 (c) CONFORMING AMENDMENTS.—

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

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

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

10 (B) by redesignating subsection (f) as sub-
11 section (e).

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

19 **SEC. 1010. STATE ENERGY PROGRAM.**

20 (a) AUTHORIZATION OF APPROPRIATIONS.—Section
21 365 of the Energy Policy and Conservation Act (42 U.S.C.
22 6325) is amended by striking subsection (f) and inserting
23 the following:

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

4 (b) COLLABORATIVE TRANSMISSION SITING.—

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

9 **“SEC. 367. DIRECT APPROPRIATIONS.**

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

17 “(1) feasibility studies for transmission line
18 routes and alternatives;

19 “(2) preparation of necessary project design
20 and permits; and

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

22 (2) CLERICAL AMENDMENT.—The table of con-
23 tents of the Energy Policy and Conservation Act
24 (Public Law 94–163; 89 Stat. 872) is amended by

1 adding at the end of the items relating to part D of
2 title III the following:

“Sec. 367. Direct appropriations.”.

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

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

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

17 For the purposes of providing funds to assist in the
18 financing of the construction, acquisition, and replacement
19 of the transmission system of the Bonneville Power Ad-
20 ministration under the Pacific Northwest Electric Power
21 Planning and Conservation Act (16 U.S.C. 839 et seq.),
22 an additional \$2,000,000,000 in borrowing authority is
23 made available under the Federal Columbia River Trans-
24 mission System Act (16 U.S.C. 838 et seq.), to remain
25 outstanding at any 1 time.

1 **Subtitle B—Cybersecurity**

2 **SEC. 1101. ENHANCING GRID SECURITY THROUGH PUBLIC-**
3 **PRIVATE PARTNERSHIPS.**

4 (a) DEFINITIONS.—In this section:

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

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

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

18 (1) ESTABLISHMENT.—The Secretary, in con-
19 sultation with the Secretary of Homeland Security
20 and, as the Secretary determines to be appropriate,
21 the heads of other relevant Federal agencies, State
22 regulatory authorities, industry stakeholders, and
23 the Electric Reliability Organization, shall carry out
24 a program—

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

6 (B) to assist with threat assessment and
7 cybersecurity training for electric utilities;

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

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

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

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

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

22 (A) take into consideration—

23 (i) the different sizes of electric utili-
24 ties; and

1 (ii) the regions that electric utilities
2 serve;

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

5 (C) to the maximum extent practicable,
6 use and leverage—

7 (i) existing Department and Depart-
8 ment of Homeland Security programs; and

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

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

19 (1) priorities, policies, procedures, and actions
20 for enhancing the physical security and cybersecurity
21 of electricity distribution systems, including behind-
22 the-meter generation, storage, and load management
23 devices, to address threats to, and vulnerabilities of,
24 electricity distribution systems; and

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

4 (A) an estimate of potential costs and ben-
5 efits of the implementation; and

6 (B) an assessment of any public-private
7 cost-sharing opportunities.

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

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

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

22 (e) SAVINGS PROVISION.—Nothing in this section af-
23 fects the authority, existing on the day before the date
24 of enactment of this Act, of any other Federal department
25 or agency, including the authority provided to the Sec-

1 retary of Homeland Security and the Director of the Cy-
2 bersecurity and Infrastructure Security Agency in title
3 XXII of the Homeland Security Act of 2002 (6 U.S.C.
4 651 et seq.).

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

6 (a) DEFINITIONS.—In this section:

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

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

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

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

24 (1) establish a testing process under the pro-
25 gram to test the cybersecurity of products and tech-

1 nologies intended for use in the bulk-power system,
2 including products relating to industrial control sys-
3 tems and operational technologies, such as super-
4 visory control and data acquisition systems;

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

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

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

20 (5) develop guidance that is informed by anal-
21 ysis and testing results under the program for elec-
22 tric utilities for the procurement of products and
23 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 recycling in the United States; and

2
3 “(X) needs for future research,
4 development, and demonstration
5 projects in electric drive vehicle battery manufacturing, recycling, and related areas, as determined by the Secretary.
6
7
8

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 relevant committees of Congress, an independent
14 review of the progress of the grants awarded
15 under subparagraph (D) in meeting the recommendations and targets included in the report.”; and
16
17
18

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 (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 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 (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 of the Energy Pol-
3 icy Act of 2005 (42 U.S.C. 16298d) is amended—

4 (1) by redesignating subsection (j) as sub-
5 section (k); and

6 (2) by inserting after subsection (i) the fol-
7 lowing:

8 “(j) REGIONAL CLEAN DIRECT AIR CAPTURE
9 HUBS.—

10 “(1) DEFINITION OF REGIONAL CLEAN DIRECT
11 AIR CAPTURE HUB.—In this subsection, the term
12 ‘regional clean direct air capture hub’ means a net-
13 work of direct air capture projects, potential carbon
14 dioxide utilization off-takers, and connective infra-
15 structure located in close proximity.

16 “(2) ESTABLISHMENT OF PROGRAM.—The Sec-
17 retary shall establish a program to support the de-
18 velopment of 4 regional clean direct air capture hubs
19 that—

20 “(A) demonstrably aid the achievement of
21 capturing carbon dioxide directly from the at-
22 mosphere;

23 “(B) have the capacity to capture and se-
24 quester at least 1,000,000 metric tons of car-
25 bon dioxide annually;

1 “(C) demonstrate the capture, processing,
2 delivery, and storage or end-use of captured
3 carbon; and

4 “(D) could be developed into a national
5 carbon network to facilitate sequestration or
6 carbon utilization.

7 “(3) SELECTION OF REGIONAL CLEAN DIRECT
8 AIR CAPTURE HUBS.—

9 “(A) SOLICITATION OF PROPOSALS.—Not
10 later than 180 days after the date of enactment
11 of the Energy Infrastructure Act, the Secretary
12 shall solicit proposals for regional clean direct
13 air capture hubs.

14 “(B) SELECTION OF HUBS.—Not later
15 than 1 year after the date of the deadline for
16 the submission of proposals under subpara-
17 graph (A), the Secretary shall select 4 regional
18 clean direct air capture hubs to be developed
19 under paragraph (2).

20 “(C) CRITERIA.—The Secretary shall se-
21 lect regional clean direct air capture hubs under
22 subparagraph (B) using the following criteria:

23 “(i) CARBON INTENSITY OF LOCAL IN-
24 DUSTRY.—To the maximum extent prac-

1 ticable, each regional direct air capture
2 hub shall be located in a region with—

3 “(I) existing carbon intensive fuel
4 production or industrial capacity; or

5 “(II) carbon intensive fuel pro-
6 duction or industrial capacity that has
7 retired or closed in the preceding 10
8 years.

9 “(ii) GEOGRAPHIC DIVERSITY.—To
10 the maximum extent practicable, each re-
11 gional clean direct air capture hub shall be
12 located in a different region of the United
13 States.

14 “(iii) CARBON POTENTIAL.—To the
15 maximum extent practicable, each regional
16 clean direct air capture hub shall be lo-
17 cated in a region with high potential for
18 carbon sequestration or utilization.

19 “(iv) HUBS IN FOSSIL-PRODUCING RE-
20 GIONS.—To the maximum extent prac-
21 ticable, at least 2 regional clean direct air
22 capture hubs shall be located in economi-
23 cally distressed communities in the regions
24 of the United States with high levels of
25 coal or shale gas resources.

1 “(v) EMPLOYMENT.—The Secretary
2 shall give priority to regional clean direct
3 air capture hubs that are likely to create
4 opportunities for skilled training and long-
5 term employment to the greatest number
6 of residents of the region.

7 “(vi) ADDITIONAL CRITERIA.—The
8 Secretary may take into consideration
9 other criteria that, in the judgement of the
10 Secretary, are necessary or appropriate to
11 carry out this subsection.

12 “(D) FUNDING OF REGIONAL DIRECT AIR
13 CAPTURE HUBS.—The Secretary may make
14 grants or enter into cooperative agreements or
15 contracts to each regional clean direct air cap-
16 ture hub selected under subparagraph (B) to
17 accelerate commercialization of, and dem-
18 onstrate the capture, processing, delivery, stor-
19 age, and end-use of carbon from the atmos-
20 phere.

21 “(4) APPROPRIATIONS.—In addition to
22 amounts otherwise made available, there is appro-
23 priated to the Secretary to carry out this subsection,
24 out of any amounts in the Treasury not otherwise

1 appropriated, \$3,500,000,000 for the period of fiscal
2 years 2022 through 2026.”.

3 **Subtitle B—Hydrogen Research**
4 **and Development**

5 **SEC. 3101. FINDINGS; PURPOSE.**

6 (a) FINDINGS.—Congress finds that—

7 (1) hydrogen plays a critical part in the com-
8 prehensive energy portfolio of the United States;

9 (2) the use of the hydrogen resources of the
10 United States—

11 (A) promotes energy security and resil-
12 ience; and

13 (B) provides economic value and environ-
14 mental benefits for diverse applications across
15 multiple sectors of the economy; and

16 (3) hydrogen can be produced from a variety of
17 domestically available clean energy sources, includ-
18 ing—

19 (A) renewable energy resources, including
20 biomass;

21 (B) fossil fuels with carbon capture, utili-
22 zation, and storage; and

23 (C) nuclear power.

1 (b) PURPOSE.—The purpose of this subtitle is to ac-
2 celerate research, development, demonstration, and de-
3 ployment of hydrogen from clean energy sources by—

4 (1) providing a statutory definition for the term
5 “clean hydrogen”;

6 (2) establishing a clean hydrogen strategy and
7 roadmap for the United States;

8 (3) establishing a clearing house for clean hy-
9 drogen program information at the National Energy
10 Technology Laboratory;

11 (4) developing a robust clean hydrogen supply
12 chain and workforce by prioritizing clean hydrogen
13 demonstration projects in economically distressed
14 communities in major shale gas regions;

15 (5) establishing regional clean hydrogen hubs;
16 and

17 (6) authorizing appropriations to carry out the
18 Department of Energy Hydrogen Program Plan,
19 dated November 2020, developed pursuant to title
20 VIII of the Energy Policy Act of 2005 (42 U.S.C.
21 16151 et seq.).

22 **SEC. 3102. DEFINITIONS.**

23 Section 803 of the Energy Policy Act of 2005 (42
24 U.S.C. 16152) is amended—

1 (1) in paragraph (5), by striking the paragraph
2 designation and heading and all that follows through
3 “when” in the matter preceding subparagraph (A)
4 and inserting the following:

5 “(5) PORTABLE; STORAGE.—The terms ‘port-
6 able’ and ‘storage’, when”;

7 (2) by redesignating paragraphs (1) through
8 (7) as paragraphs (2) through (8), respectively; and

9 (3) by inserting before paragraph (2) (as so re-
10 designated) the following:

11 “(1) CLEAN HYDROGEN; HYDROGEN.—The
12 terms ‘clean hydrogen’ and ‘hydrogen’ mean hydro-
13 gen produced in compliance with the greenhouse gas
14 emissions standard established under section 822(a),
15 including production from any fuel source.”.

16 **SEC. 3103. CLEAN HYDROGEN RESEARCH AND DEVELOP-**
17 **MENT PROGRAM.**

18 (a) IN GENERAL.—Section 805 of the Energy Policy
19 Act of 2005 (42 U.S. 16154) is amended—

20 (1) in the section heading, by striking “**PRO-**
21 **GRAMS**” and inserting “**CLEAN HYDROGEN RE-**
22 **SEARCH AND DEVELOPMENT PROGRAM**”;

23 (2) in subsection (a)—

24 (A) by striking “research and development
25 program” and inserting “crosscutting research

1 and development program (referred to in this
2 section as the ‘program’); and

3 (B) by inserting “processing,” after “pro-
4 duction,”;

5 (3) by striking subsection (b) and inserting the
6 following:

7 “(b) GOALS.—The goals of the program shall be—

8 “(1) to advance research and development to
9 demonstrate and commercialize the use of clean hy-
10 drogen in the transportation, utility, industrial, com-
11 mercial, and residential sectors; and

12 “(2) to demonstrate a standard of clean hydro-
13 gen production in the transportation, utility, indus-
14 trial, commercial, and residential sectors by 2040.”;

15 (4) in subsection (c)(3), by striking “renewable
16 fuels and biofuels” and inserting “fossil fuels with
17 carbon capture, utilization, and sequestration, re-
18 newable fuels, biofuels, and nuclear energy”;

19 (5) by striking subsection (e) and inserting the
20 following:

21 “(e) ACTIVITIES.—In carrying out the program, the
22 Secretary, in partnership with the private sector, shall
23 conduct activities to advance and support—

24 “(1) the establishment of a series of technology
25 cost goals oriented toward achieving the standard of

1 clean hydrogen production [developed under section
2 822(a)];

3 “(2) the production of clean hydrogen from di-
4 verse energy sources, including—

5 “(A) fossil fuels with carbon capture, utili-
6 zation, and sequestration;

7 “(B) hydrogen-carrier fuels (including eth-
8 anol and methanol);

9 “(C) renewable energy resources, including
10 biomass;

11 “(D) nuclear energy; and

12 “(E) any other methods the Secretary de-
13 termines to be appropriate;

14 “(3) the use of clean hydrogen for commercial,
15 industrial, and residential electric power generation;

16 “(4) the use of clean hydrogen in industrial ap-
17 plications, including steelmaking, cement, chemical
18 feedstocks, and process heat;

19 “(5) the use of clean hydrogen for use as a fuel
20 source for both residential and commercial comfort
21 heating and hot water requirements;

22 “(6) the safe and efficient delivery of hydrogen
23 or hydrogen-carrier fuels, including—

24 “(A) transmission by pipelines, including
25 retrofitting the existing natural gas transpor-

1 tation infrastructure system to enable a transi-
2 tion to transport and deliver increasing levels of
3 clean hydrogen, clean hydrogen blends, or clean
4 hydrogen carriers;

5 “(B) tanks and other distribution methods;
6 and

7 “(C) convenient and economic refueling of
8 vehicles—

9 “(i) at central refueling stations; or

10 “(ii) through distributed onsite gen-
11 eration;

12 “(7) advanced vehicle technologies, including—

13 “(A) engine and emission control systems;

14 “(B) energy storage, electric propulsion,
15 and hybrid systems;

16 “(C) automotive materials; and

17 “(D) other advanced vehicle technologies;

18 “(8) storage of hydrogen or hydrogen-carrier
19 fuels, including the development of materials for safe
20 and economic storage in gaseous, liquid, or solid
21 form;

22 “(9) the development of safe, durable, afford-
23 able, and efficient fuel cells, including fuel-flexible
24 fuel cell power systems, improved manufacturing
25 processes, high-temperature membranes, cost-effec-

1 tive fuel processing for natural gas, fuel cell stack
2 and system reliability, low-temperature operation,
3 and cold start capability; and

4 “(10) the ability of domestic clean hydrogen
5 equipment manufacturers to manufacture commer-
6 cially available competitive technologies in the
7 United States.”; and

8 (6) by adding at the end the following:

9 “(j) TARGETS.—Not later than 180 days after the
10 date of enactment of the Energy Infrastructure Act, the
11 Secretary shall establish targets for the program to ad-
12 dress near-term (up to 2 years), mid-term (up to 7 years),
13 and long-term (up to 15 years) challenges to the advance-
14 ment of clean hydrogen systems and technologies.”.

15 (b) CONFORMING AMENDMENT.—The table of con-
16 tents for the Energy Policy Act of 2005 (Public Law 109–
17 58; 119 Stat. 599) is amended by striking the item relat-
18 ing to section 805 and inserting the following:

 “Sec. 805. Clean hydrogen research and development program.”.

19 **SEC. 3104. ADDITIONAL CLEAN HYDROGEN PROGRAMS.**

20 Title VIII of the Energy Policy Act of 2005 (42
21 U.S.C. 16151 et seq.) is amended—

22 (1) by redesignating sections 813 through 816
23 as sections 818 through 821, respectively; and

24 (2) by inserting after section 812 the following:

1 **“SEC. 813. REGIONAL CLEAN HYDROGEN HUBS.**

2 “(a) DEFINITION OF REGIONAL CLEAN HYDROGEN
3 HUB.—In this section, the term ‘regional clean hydrogen
4 hub’ means a network of clean hydrogen producers, poten-
5 tial clean hydrogen consumers, and connective infrastruc-
6 ture located in close proximity.

7 “(b) ESTABLISHMENT OF PROGRAM.—The Secretary
8 shall establish a program to support the development of
9 4 regional clean hydrogen hubs that—

10 “(1) demonstrably aid the achievement of the
11 clean hydrogen production standard [developed
12 under section 822(a)];

13 “(2) demonstrate the production, processing,
14 delivery, storage, and end-use of clean hydrogen; and

15 “(3) can be developed into a national clean hy-
16 drogen network to facilitate a clean hydrogen econ-
17 omy.

18 “(c) SELECTION OF REGIONAL CLEAN HYDROGEN
19 HUBS.—

20 “(1) SOLICITATION OF PROPOSALS.—Not later
21 than 180 days after the date of enactment of the
22 Energy Infrastructure Act, the Secretary shall solicit
23 proposals for regional clean hydrogen hubs.

24 “(2) SELECTION OF HUBS.—Not later than 1
25 year after the deadline for the submission of pro-
26 posals under paragraph (1), the Secretary shall se-

1 lect 4 regional clean hydrogen hubs to be developed
2 under subsection (b).

3 “(3) CRITERIA.—The Secretary shall select re-
4 gional clean hydrogen hubs under paragraph (2)
5 using the following criteria:

6 “(A) FEEDSTOCK AND END-USE DIVER-
7 SITY.—To the maximum extent practicable, at
8 least 1 regional clean hydrogen hub shall dem-
9 onstrate—

10 “(i) the production of clean hydrogen
11 from—

12 “(I) fossil fuels;

13 “(II) renewable energy; and

14 “(III) nuclear energy; and

15 “(ii) the end-use of clean hydrogen
16 in—

17 “(I) the electric power generation
18 sector;

19 “(II) the industrial sector;

20 “(III) the residential and com-
21 mercial heating sector; and

22 “(IV) the transportation sector.

23 “(B) GEOGRAPHIC DIVERSITY.—To the
24 maximum extent practicable, each regional
25 clean hydrogen hub—

1 “(i) shall be located in a different re-
2 gion of the United States; and

3 “(ii) shall use energy resources that
4 are abundant in that region.

5 “(C) HUBS IN NATURAL GAS-PRODUCING
6 REGIONS.—To the maximum extent practicable,
7 at least 2 regional clean hydrogen hubs shall be
8 located in economically distressed communities
9 in the regions of the United States with the
10 greatest shale gas resources.

11 “(D) EMPLOYMENT.—The Secretary shall
12 give priority to regional clean hydrogen hubs
13 that are likely to create opportunities for skilled
14 training and long-term employment to the
15 greatest number of residents of the region.

16 “(E) ADDITIONAL CRITERIA.—The Sec-
17 retary may take into consideration other cri-
18 teria that, in the judgement of the Secretary,
19 are necessary or appropriate to carry out this
20 title

21 “(4) FUNDING OF REGIONAL CLEAN HYDROGEN
22 HUBS.—The Secretary may make grants to each re-
23 gional clean hydrogen hub selected under paragraph
24 (2) to accelerate commercialization of, and dem-

1 “(B)(i) clean hydrogen production and use
2 from natural gas, coal, renewable energy
3 sources, nuclear energy, and biomass; and

4 “(ii) identifying potential barriers, path-
5 ways, and opportunities, including Federal pol-
6 icy needs, to transition to a clean hydrogen
7 economy;

8 “(C) identifying—

9 “(i) economic opportunities for the
10 production, processing, transport, storage,
11 and use of clean hydrogen that exist in the
12 major shale natural gas-producing regions
13 of the United States; and

14 “(ii) environmental risks associated
15 with potential deployment of clean hydro-
16 gen technologies in those regions, and ways
17 to mitigate those risks;

18 “(D) approaches, including substrategies,
19 that reflect geographic diversity across the
20 country, to advance clean hydrogen based on re-
21 sources, industry sectors, environmental bene-
22 fits, and economic impacts in regional econo-
23 mies;

24 “(E) identifying opportunities to use, and
25 barriers to using, existing infrastructure, in-

1 including all components of the natural gas infra-
2 structure system, the carbon dioxide pipeline in-
3 frastructure system, end-use local distribution
4 networks, end-use power generators, LNG ter-
5 minals, industrial users of natural gas, and res-
6 idential and commercial consumers of natural
7 gas, for clean hydrogen deployment;

8 “(F) identifying the needs for and barriers
9 and pathways to developing clean hydrogen
10 hubs (including, where appropriate, clean hy-
11 drogen hubs coupled with carbon capture, utili-
12 zation, and storage hubs) that—

13 “(i) are regionally dispersed across
14 the United States and can leverage natural
15 gas shale plays to the maximum extent
16 practicable;

17 “(ii) can demonstrate the efficient
18 production, processing, delivery, and use of
19 clean hydrogen;

20 “(iii) include transportation corridors
21 and modes of transportation, including
22 transportation of clean hydrogen by pipe-
23 line and rail and through ports; and

1 “(iv) where appropriate, could serve
2 as joint clean hydrogen and carbon cap-
3 ture, utilization, and storage hubs;

4 “(G) prioritizing activities that improve the
5 ability of the Department to develop tools to
6 model, analyze, and optimize single-input, mul-
7 tiple-output integrated hybrid energy systems
8 and multiple-input, multiple-output integrated
9 hybrid energy systems that maximize efficiency
10 in providing hydrogen, high-value heat, elec-
11 tricity, and chemical synthesis services;

12 “(H) identifying the appropriate points of
13 interaction between and among Federal agen-
14 cies involved in the production, processing, de-
15 livery, storage, and use of clean hydrogen and
16 clarifying the responsibilities of those Federal
17 agencies, and potential regulatory obstacles and
18 recommendations for modifications, in order to
19 support the deployment of clean hydrogen; and

20 “(I) identifying geographic zones or re-
21 gions in which clean hydrogen technologies
22 could efficiently and economically be introduced
23 in order to transition existing infrastructure to
24 rely on clean hydrogen, in support of

1 production, processing, delivery, storage, and use
2 equipment manufacturing technologies and tech-
3 niques.

4 “(2) PRIORITY.—In awarding grants or enter-
5 ing into contracts, cooperative agreements, or other
6 agreements under paragraph (1), the Secretary, to
7 the maximum extent practicable, shall give priority
8 to clean hydrogen equipment manufacturing projects
9 that—

10 “(A) increase efficiency and cost-effective-
11 ness in—

12 “(i) the manufacturing process; and

13 “(ii) the use of resources, including
14 existing energy infrastructure;

15 “(B) support domestic supply chains for
16 materials and components;

17 “(C) identify and incorporate nonhaz-
18 ardous alternative materials for components
19 and devices;

20 “(D) operate in partnership with tribal en-
21 ergy development organizations, Indian Tribes,
22 Tribal organizations, Native Hawaiian commu-
23 nity-based organizations, or territories or freely
24 associated States; or

1 “(E) are located in economically distressed
2 areas of the major shale natural gas-producing
3 regions of the United States.

4 “(3) EVALUATION.—Not later than 3 years
5 after the date of enactment of the Energy Infra-
6 structure Act, and not less frequently than once
7 every 4 years thereafter, the Secretary shall conduct,
8 and make available to the public and the relevant
9 committees of Congress, an independent review of
10 the progress of the projects carried out through
11 grants awarded, or contracts, cooperative agree-
12 ments, or other agreements entered into, under
13 paragraph (1).

14 “(b) CLEAN HYDROGEN TECHNOLOGY RECYCLING
15 RESEARCH, DEVELOPMENT, AND DEMONSTRATION PRO-
16 GRAM.—

17 “(1) IN GENERAL.—In carrying out the pro-
18 grams established under sections 805 and 813, the
19 Secretary shall award multiyear grants to, and enter
20 into contracts, cooperative agreements, or any other
21 agreements authorized under this Act or other Fed-
22 eral law with, eligible entities for research, develop-
23 ment, and demonstration projects to create innova-
24 tive and practical approaches to increase the reuse

1 and recycling of clean hydrogen technologies, includ-
2 ing by—

3 “(A) increasing the efficiency and cost-ef-
4 fectiveness of the recovery of raw materials
5 from clean hydrogen technology components
6 and systems, including enabling technologies
7 such as electrolyzers and fuel cells;

8 “(B) minimizing environmental impacts
9 from the recovery and disposal processes;

10 “(C) addressing any barriers to the re-
11 search, development, demonstration, and com-
12 mercialization of technologies and processes for
13 the disassembly and recycling of devices used
14 for clean hydrogen production, processing, de-
15 livery, storage, and use;

16 “(D) developing alternative materials, de-
17 signs, manufacturing processes, and other as-
18 pects of clean hydrogen technologies;

19 “(E) developing alternative disassembly
20 and resource recovery processes that enable effi-
21 cient, cost-effective, and environmentally re-
22 sponsible disassembly of, and resource recovery
23 from, clean hydrogen technologies; and

1 “(F) developing strategies to increase con-
2 sumer acceptance of, and participation in, the
3 recycling of fuel cells.

4 “(2) DISSEMINATION OF RESULTS.—The Sec-
5 retary shall make available to the public and the rel-
6 evant committees of Congress the results of the
7 projects carried out through grants awarded, or con-
8 tracts, cooperative agreements, or other agreements
9 entered into, under paragraph (1), including any
10 educational and outreach materials developed by the
11 projects.

12 “(c) APPROPRIATIONS.—In addition to amounts oth-
13 erwise made available, there is appropriated to the Sec-
14 retary to carry out this section, out of any amounts in
15 the Treasury not otherwise appropriated, \$100,000,000
16 for each of fiscal years 2022 through 2026.

17 **“SEC. 816. CLEAN HYDROGEN ELECTROLYSIS PROGRAM.**

18 “(a) DEFINITIONS.—In this section:

19 “(1) ELECTROLYSIS.—The term ‘electrolysis’
20 means a process that uses electricity to split water
21 into hydrogen and oxygen.

22 “(2) ELECTROLYZER.—The term ‘electrolyzer’
23 means a system that produces hydrogen using elec-
24 trolysis.

1 “(3) PROGRAM.—The term ‘program’ means
2 the program established under subsection (b).

3 “(b) ESTABLISHMENT.—Not later than 90 days after
4 the date of enactment of the Energy Infrastructure Act,
5 the Secretary shall establish a research, development,
6 demonstration, commercialization, and deployment pro-
7 gram for purposes of commercialization to improve the ef-
8 ficiency, increase the durability, and reduce the cost of
9 producing clean hydrogen using electrolyzers.

10 “(c) GOAL.—The goal of the program is to reduce
11 the cost of hydrogen produced using electrolyzers to less
12 than \$2 per kilogram of hydrogen by 2026.

13 “(d) DEMONSTRATION PROJECTS.—In carrying out
14 the program, the Secretary shall fund demonstration
15 projects—

16 “(1) to demonstrate technologies that produce
17 clean hydrogen using electrolyzers; and

18 “(2) to validate information on the cost, effi-
19 ciency, durability, and feasibility of commercial de-
20 ployment of the technologies described in paragraph
21 (1).

22 “(e) FOCUS.—The program shall focus on research
23 relating to, and the development, demonstration, and de-
24 ployment of—

1 “(1) low-temperature electrolyzers, including
2 liquid-alkaline electrolyzers, membrane-based
3 electrolyzers, and other advanced electrolyzers, capa-
4 ble of converting intermittent sources of electric
5 power to clean hydrogen with enhanced efficiency
6 and durability;

7 “(2) high-temperature electrolyzers that com-
8 bine electricity and heat to improve the efficiency of
9 clean hydrogen production;

10 “(3) advanced reversible fuel cells that combine
11 the functionality of an electrolyzer and a fuel cell;

12 “(4) new highly active, selective, and durable
13 electrolyzer catalysts and electro-catalysts that—

14 “(A) greatly reduce or eliminate the need
15 for platinum group metals; and

16 “(B) enable electrolysis of complex mix-
17 tures with impurities, including seawater;

18 “(5) modular electrolyzers for distributed en-
19 ergy systems and the bulk-power system (as defined
20 in section 215(a) of the Federal Power Act (16
21 U.S.C. 824o(a)));

22 “(6) low-cost membranes or electrolytes and
23 separation materials that are durable in the presence
24 of impurities or seawater;

1 “(7) improved component design and material
2 integration, including with respect to electrodes, po-
3 rous transport layers and bipolar plates, and bal-
4 ance-of-system components, to allow for scale-up and
5 domestic manufacturing of electrolyzers at a high
6 volume;

7 “(8) clean hydrogen storage technologies;

8 “(9) technologies that integrate hydrogen pro-
9 duction with—

10 “(A) clean hydrogen compression and dry-
11 ing technologies;

12 “(B) clean hydrogen storage; and

13 “(C) transportation or stationary systems;

14 and

15 “(10) integrated systems that combine hydro-
16 gen production with renewable power generation
17 technologies, including hybrid systems with hydrogen
18 storage.

19 “(f) GRANTS, CONTRACTS, COOPERATIVE AGREE-
20 MENTS.—

21 “(1) GRANTS.—In carrying out the program,
22 the Secretary shall award grants, on a competitive
23 basis, to eligible entities for projects that the Sec-
24 retary determines would provide the greatest

1 progress toward achieving the goal of the program
2 described in subsection (c).

3 “(2) CONTRACTS AND COOPERATIVE AGREE-
4 MENTS.—In carrying out the program, the Secretary
5 may enter into contracts and cooperative agreements
6 with eligible entities and Federal agencies for
7 projects that the Secretary determines would further
8 the purpose of the program described in subsection
9 (b).

10 “(3) ELIGIBILITY; APPLICATIONS.—

11 “(A) IN GENERAL.—The eligibility of an
12 entity to receive a grant under paragraph (1),
13 to enter into a contract or cooperative agree-
14 ment under paragraph (2), or to receive fund-
15 ing for a demonstration project under sub-
16 section (d) shall be determined by the Sec-
17 retary.

18 “(B) APPLICATIONS.—An eligible entity
19 desiring to receive a grant under paragraph (1),
20 to enter into a contract or cooperative agree-
21 ment under paragraph (2), or to receive fund-
22 ing for a demonstration project under sub-
23 section (d) shall submit to the Secretary an ap-
24 plication at such time, in such manner, and

1 containing such information as the Secretary
2 may require.

3 “(g) APPROPRIATIONS.—In addition to amounts oth-
4 erwise made available, there is appropriated to the Sec-
5 retary to carry out the program, out of any amounts in
6 the Treasury not otherwise appropriated, \$200,000,000
7 for each of fiscal years 2022 through 2026, to remain
8 available until expended.

9 **“SEC. 817. LABORATORY MANAGEMENT.**

10 “(a) IN GENERAL.—The National Energy Tech-
11 nology Laboratory shall be the lead National Laboratory
12 for purposes of carrying out the programs established
13 under sections 813, 815, and 816.

14 “(b) COLLABORATION; CLEARINGHOUSE.—In car-
15 rying out subsection (a), the National Energy Technology
16 Laboratory shall—

17 “(1) collaborate with—

18 “(A) other National Laboratories;

19 “(B) institutions of higher education;

20 “(C) research institutes;

21 “(D) industrial researchers; and

22 “(E) international researchers; and

23 “(2) act as a clearinghouse to collect informa-
24 tion from, and distribute information to, the Na-

1 tional Laboratories and other entities described in
2 subparagraphs (B) through (E) of paragraph (1).”.

3 **SEC. 3105. CLEAN HYDROGEN PRODUCTION QUALIFICA-**
4 **TIONS.**

5 (a) IN GENERAL.—The Energy Policy Act of 2005
6 (42 U.S.C. 16151 et seq.) (as amended by section
7 3104(1)) is amended by adding at the end the following:

8 **“SEC. 822. CLEAN HYDROGEN PRODUCTION QUALIFICA-**
9 **TIONS.**

10 “(a) IN GENERAL.—The Secretary, in consultation
11 with the Administrator of the Environmental Protection
12 Agency, shall develop a greenhouse gas emissions standard
13 for clean hydrogen production that shall apply to activities
14 carried out under this title.

15 “(b) APPLICATION.—The standard developed under
16 subsection (a) shall apply to clean hydrogen production
17 from renewable, fossil, nuclear, and other fuel sources
18 using any applicable production technology.”.

19 (b) CONFORMING AMENDMENT.—The table of con-
20 tents for the Energy Policy Act of 2005 (Public Law 109–
21 58; 119 Stat. 599) is amended by striking the items relat-
22 ing to sections 813 through 816 and inserting the fol-
23 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.”.

1 **Subtitle C—Nuclear Energy**
2 **Infrastructure**

3 **SEC. 3201. INFRASTRUCTURE PLANNING FOR MICRO NU-**
4 **CLEAR REACTORS.**

5 (a) DEFINITION OF MICRO NUCLEAR REACTOR.—In
6 this section, the term “micro nuclear reactor” means a
7 nuclear reactor that has a power production capacity that
8 is not greater than 50 megawatts.

9 (b) REPORT.—Not later than 180 days after the date
10 of enactment of this Act, the Secretary shall submit to
11 the Committee on Energy and Natural Resources of the
12 Senate and the Committees on Energy and Commerce and
13 Science, Space, and Technology of the House of Rep-
14 resentatives a report on the plans of the Department to
15 enhance energy resilience with the use of micro nuclear
16 reactors.

17 (c) ELEMENTS.—The report required by subsection
18 (b) shall address the following:

19 (1) An evaluation by the Department of current
20 resilience and carbon reduction requirements for en-
21 ergy for facilities of the Department to determine
22 whether changes are needed to address—

1 (A) the causes of, and contributing factors
2 for, the February 2021 Electric Reliability
3 Council of Texas power outages;

4 (B) the need to provide uninterrupted
5 power to facilities of the Department for at
6 least 3 days during power grid failures;

7 (C) the need for protection against cyber
8 threats and electromagnetic pulses; and

9 (D) resilience to extreme natural events,
10 including earthquakes, volcanic activity, tor-
11 nados, hurricanes, floods, tsunamis, seiches, a
12 large quantity of snowfall, and very low or high
13 temperatures.

14 (2) A strategy of the Department for using nu-
15 clear energy to meet resilience and carbon reduction
16 goals of facilities of the Department.

17 (3) A strategy to partner with private industry
18 to develop and deploy micro nuclear reactors to re-
19 mote communities in order to replace diesel genera-
20 tion and other fossil fuels.

21 (4) An assessment by the Department of the
22 value associated with enhancing the resilience of a
23 facility of the Department by transitioning to power
24 from micro nuclear reactors and to co-located nu-
25 clear facilities with the capability to provide dedi-

1 cated power to the facility of the Department during
2 a grid outage or failure.

3 (5) The plans of the Department—

4 (A) for deploying a micro nuclear reactor
5 at a facility of the Department in the United
6 States by 2026; and

7 (B) to include micro nuclear reactors in
8 the planning for meeting future facility energy
9 needs.

10 **SEC. 3202. PROPERTY INTERESTS RELATING TO CERTAIN**
11 **PROJECTS AND PROTECTION OF INFORMA-**
12 **TION RELATING TO CERTAIN AGREEMENTS.**

13 (a) PROPERTY INTERESTS RELATING TO FEDER-
14 ALLY FUNDED ADVANCED NUCLEAR REACTOR
15 PROJECTS.—

16 (1) DEFINITIONS.—In this section:

17 (A) ADVANCED NUCLEAR REACTOR.—The
18 term “advanced nuclear reactor” has the mean-
19 ing given the term in section 951(b) of the En-
20 ergy Policy Act of 2005 (42 U.S.C. 16271(b)).

21 (B) PROPERTY INTEREST.—

22 (i) IN GENERAL.—Except as provided
23 in clause (ii), the term “property interest”
24 means any interest in real property or per-
25 sonal property (as those terms are defined

1 in section 200.1 of title 2, Code of Federal
2 Regulations (as in effect on the date of en-
3 actment of this Act)).

4 (ii) EXCLUSION.—The term “property
5 interest” does not include any interest in
6 intellectual property developed using fund-
7 ing provided under a project described in
8 paragraph (3).

9 (2) ASSIGNMENT OF PROPERTY INTERESTS.—
10 The Secretary may assign to any entity, including
11 the United States, fee title or any other property in-
12 terest acquired by the Secretary under an agreement
13 entered into with respect to a project described in
14 paragraph (3).

15 (3) PROJECT DESCRIBED.—A project referred
16 to in paragraph (2) is—

17 (A) a project for which funding is provided
18 pursuant to the funding opportunity announce-
19 ment of the Department numbered DE-FOA-
20 0002271, including any project for which fund-
21 ing has been provided pursuant to that an-
22 nouncement as of the date of enactment of this
23 Act;

24 (B) any other project for which funding is
25 provided using amounts made available for the

1 Advanced Reactor Demonstration Program of
2 the Department under the heading “Nuclear
3 Energy” under the heading “ENERGY PRO-
4 GRAMS” in title III of division C of the Fur-
5 ther Consolidated Appropriations Act, 2020
6 (Public Law 116–94; 133 Stat. 2670);

7 (C) any other project for which Federal
8 funding is provided under the Advanced Reac-
9 tor Demonstration Program of the Department;
10 or

11 (D) a project—

12 (i) relating to advanced nuclear reac-
13 tors; and

14 (ii) for which Federal funding is pro-
15 vided under a program that is similar to,
16 or a successor of, the Advanced Reactor
17 Demonstration Program of the Depart-
18 ment.

19 (4) RETROACTIVE VESTING.—The vesting of fee
20 title or any other property interest assigned under
21 paragraph (2) shall be retroactive to the date on
22 which the applicable project first received Federal
23 funding as described in any of subparagraphs (A)
24 through (D) of paragraph (3).

1 (b) CONSIDERATIONS IN COOPERATIVE RESEARCH
2 AND DEVELOPMENT AGREEMENTS.—

3 (1) IN GENERAL.—Section 12(c)(7)(B) of the
4 Stevenson-Wydler Technology Innovation Act of
5 1980 (15 U.S.C. 3710a(c)(7)(B)) is amended—

6 (A) by inserting “(i)” after “(B)”;

7 (B) in clause (i), as so designated, by
8 striking “The director” and inserting “Subject
9 to clause (ii), the director”; and

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

11 “(II) The agency may authorize
12 the director to provide appropriate
13 protections against dissemination de-
14 scribed in clause (i) for a total period
15 of not more than 30 years if the agen-
16 cy determines that the nature of the
17 information protected against dissemi-
18 nation, including nuclear technology,
19 could reasonably require an extended
20 period of that protection to reach
21 commercialization.”.

22 (2) APPLICABILITY.—

23 (A) DEFINITION.—In this subsection, the
24 term “cooperative research and development
25 agreement” has the meaning given the term in

1 section 12(d) of the Stevenson-Wydler Tech-
2 nology Innovation Act of 1980 (15 U.S.C.
3 3710a(d)).

4 (B) RETROACTIVE EFFECT.—Clause (ii) of
5 section 12(c)(7)(B) of the Stevenson-Wydler
6 Technology Innovation Act of 1980 (15 U.S.C.
7 3710a(c)(7)(B)), as added by subsection (a) of
8 this section, shall apply with respect to any co-
9 operative research and development agreement
10 that is in effect as of the day before the date
11 of enactment of this Act.

12 (c) DEPARTMENT OF ENERGY CONTRACTS.—Section
13 646(g)(5) of the Department of Energy Organization Act
14 (42 U.S.C. 7256(g)(5)) is amended—

15 (1) by striking “(5) The Secretary” and insert-
16 ing the following:

17 “(5) PROTECTION FROM DISCLOSURE.—

18 “(A) IN GENERAL.—The Secretary”; and

19 (2) in subparagraph (A) (as so designated)—

20 (A) by striking “, for up to 5 years after
21 the date on which the information is devel-
22 oped,”; and

23 (B) by striking “agency.” and inserting
24 the following: “agency—

1 “(i) for up to 5 years after the date
2 on which the information is developed; or

3 “(ii) for up to 30 years after the date
4 on which the information is developed, if
5 the Secretary determines that the nature
6 of the technology under the transaction, in-
7 cluding nuclear technology, could reason-
8 ably require an extended period of protec-
9 tion from disclosure to reach commer-
10 cialization.

11 “(B) EXTENSION DURING TERM.—The
12 Secretary may extend the period of protection
13 from disclosure during the term of any trans-
14 action described in subparagraph (A) in accord-
15 ance with that subparagraph.”.

16 **SEC. 3203. CIVIL NUCLEAR CREDIT PROGRAM.**

17 (a) DEFINITIONS.—In this section:

18 (1) CERTIFIED NUCLEAR REACTOR.—The term
19 “certified nuclear reactor” means a nuclear reactor
20 that—

21 (A) competes in a competitive electricity
22 market; and

23 (B) is certified under subsection
24 (c)(2)(A)(i) to submit a sealed bid in accord-
25 ance with subsection (d).

1 (2) CREDIT.—The term “credit” means a credit
2 allocated to a certified nuclear reactor under sub-
3 section (e)(2).

4 (b) ESTABLISHMENT OF PROGRAM.—The Secretary
5 shall establish a civil nuclear credit program—

6 (1) to evaluate nuclear reactors that are pro-
7 jected to cease operations due to economic factors;
8 and

9 (2) to allocate credits to certified nuclear reac-
10 tors that are selected under paragraph (1)(B) of
11 subsection (e) to receive credits under paragraph (2)
12 of that subsection.

13 (c) CERTIFICATION.—

14 (1) APPLICATION.—

15 (A) IN GENERAL.—In order to be certified
16 under paragraph (2)(A)(i), the owner or oper-
17 ator of a nuclear reactor that is projected to
18 cease operations due to economic factors shall
19 submit to the Secretary an application at such
20 time, in such manner, and containing such in-
21 formation as the Secretary determines to be ap-
22 propriate, including—

23 (i) information on the operating costs
24 necessary to make the determination de-

1 scribed in paragraph (2)(A)(ii)(I), includ-
2 ing—

3 (I) the average projected annual
4 operating loss in dollars per mega-
5 watt-hour expected to be incurred by
6 the nuclear reactor over the 4-year pe-
7 riod for which credits would be allo-
8 cated;

9 (II) any private or publicly avail-
10 able data with respect to current or
11 projected bulk power market prices;

12 (III) out-of-market revenue
13 streams;

14 (IV) operations and maintenance
15 costs;

16 (V) capital costs, including fuel;
17 and

18 (VI) operational and market
19 risks;

20 (ii) an estimate of the potential incre-
21 mental air pollutants that would result if
22 the nuclear reactor were to cease oper-
23 ations;

24 (iii) known information on the source
25 of produced uranium and the location

1 where the uranium is converted, enriched,
2 and fabricated into fuel assemblies for the
3 nuclear reactor for the 4-year period for
4 which credits would be allocated; and

5 (iv) a detailed plan to sustain oper-
6 ations at the conclusion of the applicable
7 4-year period for which credits would be
8 allocated—

9 (I) without receiving additional
10 credits; or

11 (II) with the receipt of additional
12 credits of a lower amount than the
13 credits allocated during that 4-year
14 credit period.

15 (B) TIMELINE.—The Secretary shall ac-
16 cept applications described in subparagraph
17 (A)—

18 (i) until the date that is 120 days
19 after the date of enactment of this Act;
20 and

21 (ii) not less frequently than every year
22 thereafter.

23 (2) DETERMINATION TO CERTIFY.—

24 (A) DETERMINATION.—

1 (i) IN GENERAL.—Not later than 60
2 days after the applicable date under sub-
3 paragraph (B) of paragraph (1), the Sec-
4 retary shall determine whether to certify,
5 in accordance with clauses (ii) and (iii),
6 each nuclear reactor for which an applica-
7 tion is submitted under subparagraph (A)
8 of that paragraph.

9 (ii) MINIMUM REQUIREMENTS.—To
10 the maximum extent practicable, the Sec-
11 retary shall only certify a nuclear reactor
12 under clause (i) if—

13 (I) after considering the informa-
14 tion submitted under paragraph
15 (1)(A)(i), the Secretary determines
16 that the nuclear reactor is projected
17 to cease operations due to economic
18 factors; and

19 (II) after considering the esti-
20 mate submitted under paragraph
21 (1)(A)(ii), the Secretary determines
22 that pollutants would increase if the
23 nuclear reactor were to cease oper-
24 ations and be replaced with other
25 types of power generation.

1 (iii) PRIORITY.—In determining
2 whether to certify a nuclear reactor under
3 clause (i), the Secretary shall give priority
4 to a nuclear reactor that uses uranium
5 that is produced, converted, enriched, and
6 fabricated into fuel assemblies in the
7 United States.

8 (B) NOTICE.—For each application re-
9 ceived under paragraph (1)(A), the Secretary
10 shall provide to the applicable owner or oper-
11 ator, as applicable—

12 (i) a notice of the certification of the
13 applicable nuclear reactor; or

14 (ii) a notice that describes the reasons
15 why the certification of the applicable nu-
16 clear reactor was denied.

17 (d) BIDDING PROCESS.—

18 (1) IN GENERAL.—Subject to paragraph (2),
19 the Secretary shall establish a deadline by which
20 each certified nuclear reactor shall submit to the
21 Secretary a sealed bid that—

22 (A) describes the price per megawatt-hour
23 required to maintain operations of the certified
24 nuclear reactor during the 4-year period for

1 which the certified nuclear reactor would receive
2 credits; and

3 (B) includes a commitment, subject to the
4 receipt of credits, to provide a specific number
5 of megawatt-hours of generation during the 4-
6 year period for which credits would be allocated.

7 (2) REQUIREMENT.—The deadline established
8 under paragraph (1) shall be not later than 30 days
9 after the first date on which the Secretary has made
10 the determination described in paragraph (2)(A)(i)
11 of subsection (c) with respect to each application
12 submitted under paragraph (1)(A) of that sub-
13 section.

14 (e) ALLOCATION.—

15 (1) AUCTION.—Notwithstanding section 169 of
16 the Atomic Energy Act of 1954 (42 U.S.C. 2209),
17 the Secretary shall—

18 (A) in consultation with the heads of appli-
19 cable Federal agencies, establish a process for
20 evaluating bids submitted under subsection
21 (d)(1) through an auction process; and

22 (B) select certified nuclear reactors to be
23 allocated credits.

24 (2) CREDITS.—Subject to subsection (f)(2), on
25 selection under paragraph (1), a certified nuclear re-

1 actor shall be allocated credits for a 4-year period
2 beginning on the date of the selection.

3 (3) REQUIREMENT.—To the maximum extent
4 practicable, the Secretary shall use the amounts
5 made available for credits under this section to allo-
6 cate credits to as many certified nuclear reactors as
7 possible.

8 (f) RENEWAL.—

9 (1) IN GENERAL.—The owner or operator of a
10 certified nuclear reactor may seek to recertify the
11 nuclear reactor in accordance with this section.

12 (2) LIMITATION.—Notwithstanding any other
13 provision of this section, the Secretary may not allo-
14 cate any credits after September 30, 2031.

15 (g) ADDITIONAL REQUIREMENTS.—

16 (1) AUDIT.—During the 4-year period begin-
17 ning on the date on which a certified nuclear reactor
18 first receives a credit, the Secretary shall periodically
19 audit the certified nuclear reactor.

20 (2) RECAPTURE.—The Secretary shall, by regu-
21 lation, provide for the recapture of the allocation of
22 any credit to a certified nuclear reactor that, during
23 the period described in paragraph (1)—

24 (A) terminates operations; or

1 (B) does not operate at an annual loss in
2 the absence of an allocation of credits to the
3 certified nuclear reactor.

4 (3) CONFIDENTIALITY.—The Secretary shall es-
5 tablish procedures to ensure that any confidential,
6 private, proprietary, or privileged information that is
7 included in a sealed bid submitted under this section
8 is not publicly disclosed or otherwise improperly
9 used.

10 (h) REPORT.—Not later than January 1, 2024, the
11 Comptroller General of the United States shall submit to
12 Congress a report with respect to the credits allocated to
13 certified nuclear reactors, which shall include—

14 (1) an evaluation of the effectiveness of the
15 credits in avoiding air pollutants while ensuring grid
16 reliability;

17 (2) a quantification of the ratepayer savings
18 achieved under this section; and

19 (3) any recommendations to renew or expand
20 the credits.

21 (i) APPROPRIATIONS.—In addition to amounts other-
22 wise made available, there is appropriated to the Secretary
23 to carry out this section, out of any amounts in the Treas-
24 ury not otherwise appropriated, \$1,200,000,000 for each
25 of fiscal years 2022 through 2026.

1 **Subtitle D—Miscellaneous**

2 **SEC. 3301. SOLAR ENERGY TECHNOLOGIES ON CURRENT**
3 **AND FORMER MINE LAND.**

4 Section 3004 of the Energy Act of 2020 (42 U.S.C.
5 16238) is amended—

6 (1) in subsection (a)—

7 (A) by redesignating paragraphs (6)
8 through (15) as paragraphs (7) through (16),
9 respectively; and

10 (B) by inserting after paragraph (5) the
11 following:

12 “(6) MINE LAND.—The term ‘mine land’ means
13 land subject to title V of the Surface Mining Control
14 and Reclamation Act of 1977 (30 U.S.C. 1251 et
15 seq.).”; and

16 (2) in subsection (b)(6)(B)—

17 (A) in the matter preceding clause (i), by
18 inserting “, in consultation with the Secretary
19 of the Interior and the Administrator of the
20 Environmental Protection Agency for purposes
21 of clause (iv),” after “the Secretary”;

22 (B) in clause (iii), by striking “and” after
23 the semicolon;

24 (C) by redesignating clause (iv) as clause
25 (v); and

1 (D) by inserting after clause (iii) the fol-
2 lowing:

3 “(iv) a description of the technical
4 and economic viability of siting solar en-
5 ergy technologies on current and former
6 mine land, including necessary interconnec-
7 tion and transmission siting; and”.

8 **SEC. 3302. CLEAN ENERGY DEMONSTRATION PROGRAM ON**
9 **CURRENT AND FORMER MINE LAND.**

10 (a) DEFINITIONS.—In this section:

11 (1) CLEAN ENERGY PROJECT.—The term
12 “clean energy project” means a project that dem-
13 onstrates 1 or more of the following technologies:

14 (A) Solar.

15 (B) Micro-grids.

16 (C) Geothermal.

17 (D) Direct air capture.

18 (E) Fossil-fueled electricity generation with
19 carbon capture, utilization, and sequestration.

20 (F) Energy storage, including pumped
21 storage hydropower and compressed air storage.

22 (G) Advanced nuclear technologies.

23 (2) ECONOMICALLY DISTRESSED AREA.—The
24 term “economically distressed area” means an area
25 described in section 301(a) of the Public Works and

1 Economic Development Act of 1965 (42 U.S.C.
2 3161(a)).

3 (3) MINE LAND.—The term “mine land” means
4 land subject to title V of the Surface Mining Control
5 and Reclamation Act of 1977 (30 U.S.C. 1251 et
6 seq.).

7 (4) PROGRAM.—The term “program” means
8 the demonstration program established under sub-
9 section (b).

10 (b) ESTABLISHMENT.—The Secretary shall establish
11 a program to demonstrate the technical and economic via-
12 bility of carrying out clean energy projects on current and
13 former mine land.

14 (c) SELECTION OF DEMONSTRATION PROJECTS.—

15 (1) IN GENERAL.—In carrying out the program,
16 the Secretary shall select not more than 3 clean en-
17 ergy projects, to be carried out in geographically di-
18 verse regions.

19 (2) ELIGIBILITY.—To be eligible to be selected
20 for participation in the program under paragraph
21 (1), a clean energy project shall demonstrate, as de-
22 termined by the Secretary, a technology on a current
23 or former mine land site with a reasonable expecta-
24 tion of commercial viability.

1 (3) PRIORITY.—In selecting clean energy
2 projects for participation in the program under
3 paragraph (1), the Secretary shall prioritize clean
4 energy projects that will—

5 (A) be carried out in a location where the
6 greatest number of jobs can be created from the
7 successful demonstration of the clean energy
8 project;

9 (B) provide the greatest net impact in
10 avoiding or reducing anthropogenic emissions of
11 greenhouse gases;

12 (C) provide the greatest domestic job cre-
13 ation (both directly and indirectly) during the
14 implementation of the clean energy project;

15 (D) provide the greatest job creation and
16 economic development in the vicinity of the
17 clean energy project, particularly—

18 (i) in economically distressed areas;

19 and

20 (ii) with respect to dislocated workers
21 who were previously employed in manufac-
22 turing, coal power plants, or coal mining;

23 (E) have the greatest potential for techno-
24 logical innovation and commercial deployment;

1 (F) have the lowest levelized cost of gen-
2 erated or stored energy;

3 (G) have the lowest rate of greenhouse gas
4 emissions per unit of electricity generated or
5 stored; and

6 (H) have the shortest project time from
7 permitting to completion.

8 (4) PROJECT SELECTION.—The Secretary shall
9 solicit proposals for clean energy projects and select
10 clean energy project finalists in consultation with the
11 Secretary of the Interior, the Administrator of the
12 Environmental Protection Agency, and the Secretary
13 of Labor.

14 (d) CONSULTATION.—The Secretary shall consult
15 with the Director of the Office of Surface Mining Rec-
16 lamation and Enforcement and the Administrator of the
17 Environmental Protection Agency, acting through the Of-
18 fice of Brownfields and Land Revitalization, to determine
19 whether it is necessary to promulgate regulations or issue
20 guidance in order to prioritize and expedite the siting of
21 clean energy projects on current and former mine land
22 sites.

23 (e) TECHNICAL ASSISTANCE.—The Secretary shall
24 provide technical assistance to project applicants selected
25 for participation in the program under subsection (c) to

1 assess the needed interconnection, transmission, and other
2 grid components and permitting and siting necessary to
3 interconnect, on current and former mine land where the
4 project will be sited, any generation or storage with the
5 electric grid.

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

11 **SEC. 3303. STUDY AND REPORT ON HYPERLOOP TECH-**
12 **NOLOGIES.**

13 (a) IN GENERAL.—Not later than 1 year after the
14 date of enactment of this Act, the Secretary shall conduct,
15 and submit to Congress a report describing the results of,
16 a study on the opportunities for, and barriers to, deploying
17 hyperloop technologies in the United States.

18 (b) INCLUSIONS.—The report submitted under sub-
19 section (a) shall include—

20 (1) a description of any current research and
21 development activities carried out by the Depart-
22 ment with respect to hyperloop technologies;

23 (2) recommendations for future research, devel-
24 opment, and demonstration and funding needs to

1 support the utilization and scale-up of hyperloop
2 technologies;

3 (3) identifications of sites that would be suit-
4 able for research, development, and demonstration
5 projects relating to hyperloop technologies; and

6 (4) a description of the potential for job cre-
7 ation and workforce needs if hyperloop technologies
8 were deployed.

9 **SEC. 3304. HYDROPOWER.**

10 In addition to amounts otherwise made available,
11 there is appropriated to the Secretary to carry out activi-
12 ties under sections 242 and 243 of the Energy Policy Act
13 of 2005 (42 U.S.C. 15881, 15882), out of any amounts
14 in the Treasury not otherwise appropriated,
15 \$2,253,600,000 for the period of fiscal years 2022
16 through 2026.

17 **TITLE IV—ENABLING ENERGY**
18 **INFRASTRUCTURE INVEST-**
19 **MENT AND DATA COLLEC-**
20 **TION**

21 **Subtitle A—Department of Energy**
22 **Loan Program**

23 **SEC. 4001. DEPARTMENT OF ENERGY LOAN PROGRAMS.**

24 (a) TITLE XVII INNOVATIVE ENERGY LOAN GUAR-
25 ANTEE PROGRAM.—

1 (1) REASONABLE PROSPECT OF REPAYMENT.—
2 Section 1702(d)(1) of the Energy Policy Act of 2005
3 (42 U.S.C. 16512(d)(1)) is amended—

4 (A) by striking the paragraph designation
5 and heading and all that follows through “No
6 guarantee” and inserting the following:

7 “(1) REQUIREMENT.—

8 “(A) IN GENERAL.—No guarantee”; and

9 (B) by adding at the end the following:

10 “(B) REASONABLE PROSPECT OF REPAY-
11 MENT.—The Secretary shall base a determina-
12 tion of whether there is reasonable prospect of
13 repayment under subparagraph (A) on a com-
14 prehensive evaluation of whether the borrower
15 has a reasonable prospect of repaying the guar-
16 anteed obligation for the eligible project, includ-
17 ing an evaluation of—

18 “(i) the strength of the contractual
19 terms of the eligible project (if commer-
20 cially reasonably available);

21 “(ii) the forecast of noncontractual
22 cash flows supported by market projections
23 from reputable sources, as determined by
24 the Secretary;

1 “(iii) cash sweeps and other structure
2 enhancements;

3 “(iv) the projected financial strength
4 of the borrower—

5 “(I) at the time of loan close;
6 and

7 “(II) throughout the loan term
8 after the project is completed;

9 “(v) the financial strength of the in-
10 vestors and strategic partners of the bor-
11 rower, if applicable; and

12 “(vi) other financial metrics and anal-
13 yses that are relied on by the private lend-
14 ing community and nationally recognized
15 credit rating agencies, as determined ap-
16 propriate by the Secretary.”.

17 (2) LOAN GUARANTEES FOR PROJECTS THAT
18 INCREASE THE DOMESTIC SUPPLY OF CRITICAL MIN-
19 ERALS.—Section 1703(b) of the Energy Policy Act
20 of 2005 (42 U.S.C. 16513(b)) is amended by adding
21 at the end the following:

22 “(13) Projects that increase the domestic sup-
23 ply of critical minerals (as defined in section
24 7002(a) of the Energy Act of 2020 (30 U.S.C.
25 1606(a)), including through the production, proc-

1 essing, manufacturing, recycling, or fabrication of
2 mineral alternatives.”.

3 (b) **ADVANCED TECHNOLOGY VEHICLE MANUFAC-**
4 **TURING.—**

5 (1) **ELIGIBILITY.—**Section 136(a)(1) of the En-
6 ergy Independence and Security Act of 2007 (42
7 U.S.C. 17013(a)(1)) is amended—

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

10 (B) by redesignating subparagraphs (A)
11 through (C) as clauses (i) through (iii), respec-
12 tively, and indenting appropriately;

13 (C) in the matter preceding clause (i) (as
14 so redesignated), by striking “means an ultra”
15 and inserting the following: “means—

16 “(A) an ultra”; and

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

18 “(B) a medium duty vehicle or a heavy
19 duty vehicle that exceeds 125 percent of the
20 greenhouse gas emissions and fuel efficiency
21 standards established by the final rule of the
22 Environmental Protection Agency entitled
23 ‘Greenhouse Gas Emissions and Fuel Efficiency
24 Standards for Medium- and Heavy-Duty En-

1 gines and Vehicles—Phase 2’ (81 Fed. Reg.
2 73478 (October 25, 2016));

3 “(C) a train or locomotive;

4 “(D) marine transportation; and

5 “(E) hyperloop technology.”.

6 (2) REASONABLE PROSPECT OF REPAYMENT.—

7 Section 136(d) of the Energy Independence and Se-
8 curity Act of 2007 (42 U.S.C. 17013(d)) is amend-
9 ed—

10 (A) by striking paragraph (3) and insert-
11 ing the following:

12 “(3) SELECTION OF ELIGIBLE PROJECTS.—

13 “(A) IN GENERAL.—The Secretary shall
14 select eligible projects to receive loans under
15 this subsection if the Secretary determines
16 that—

17 “(i) the loan recipient—

18 “(I) has a reasonable prospect of
19 repaying the principal and interest on
20 the loan;

21 “(II) will provide sufficient infor-
22 mation to the Secretary for the Sec-
23 retary to ensure that the qualified in-
24 vestment is expended efficiently and
25 effectively; and

1 “(III) has met such other criteria
2 as may be established and published
3 by the Secretary; and

4 “(ii) the amount of the loan (when
5 combined with amounts available to the
6 loan recipient from other sources) will be
7 sufficient to carry out the project.

8 “(B) REASONABLE PROSPECT OF REPAY-
9 MENT.—The Secretary shall base a determina-
10 tion of whether there is a reasonable prospect
11 of repayment of the principal and interest on a
12 loan under subparagraph (A)(i)(I) on a com-
13 prehensive evaluation of whether the loan re-
14 cipient has a reasonable prospect of repaying
15 the principal and interest, including an evalua-
16 tion of—

17 “(i) the strength of the contractual
18 terms of the eligible project (if commer-
19 cially reasonably available);

20 “(ii) the forecast of noncontractual
21 cash flows supported by market projections
22 from reputable sources, as determined by
23 the Secretary;

24 “(iii) cash sweeps and other structure
25 enhancements;

1 “(iv) the projected financial strength
2 of the loan recipient—

3 “(I) at the time of loan close;
4 and

5 “(II) throughout the loan term
6 after the project is completed;

7 “(v) the financial strength of the in-
8 vestors and strategic partners of the loan
9 recipient, if applicable; and

10 “(vi) other financial metrics and anal-
11 yses that are relied on by the private lend-
12 ing community and nationally recognized
13 credit rating agencies, as determined ap-
14 propriate by the Secretary.”; and

15 (B) in paragraph (4)—

16 (i) in subparagraph (C), by striking
17 “and” after the semicolon;

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

21 (iii) by adding at the end the fol-
22 lowing:

23 “(E) shall be subject to the condition that
24 the loan is not subordinate to other financing.”.

1 (3) ADDITIONAL REFORMS.—Section 136 of the
2 Energy Independence and Security Act of 2007 (42
3 U.S.C. 17013) is amended—

4 (A) in subsection (h)—

5 (i) in the subsection heading, by strik-
6 ing “AUTOMOBILE” and inserting “AD-
7 VANCED TECHNOLOGY VEHICLE”; and

8 (ii) in paragraph (1)(B), by striking
9 “automobiles, or components of auto-
10 mobiles” and inserting “advanced tech-
11 nology vehicles, or components of advanced
12 technology vehicles”;

13 (B) by striking subsection (i);

14 (C) by redesignating subsection (j) as sub-
15 section (i); and

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

17 “(j) COORDINATION.—In carrying out this section,
18 the Secretary shall coordinate with relevant vehicle, bio-
19 energy, and hydrogen and fuel cell demonstration project
20 activities supported by the Department.

21 “(k) OUTREACH.—In carrying out this section, the
22 Secretary shall—

23 “(1) provide assistance with the completion of
24 applications for awards or loans under this section;
25 and

1 “(2) conduct outreach, including through con-
2 ferences and online programs, to disseminate infor-
3 mation on awards and loans under this section to
4 potential applicants.

5 “(1) REPORT.—Not later than 2 years after the date
6 of enactment of this subsection, and every 3 years there-
7 after, the Secretary shall submit to Congress a report on
8 the status of projects supported by a loan under this sec-
9 tion, including—

10 “(1) a list of projects receiving a loan under
11 this section, including the loan amount and con-
12 struction status of each project;

13 “(2) the status of the loan repayment for each
14 project, including future repayment projections;

15 “(3) data regarding the number of direct and
16 indirect jobs retained, restored, or created by fi-
17 nanced projects;

18 “(4) the number of new projects projected to
19 receive a loan under this section in the next 2 years,
20 including the projected aggregate loan amount over
21 the next 2 years;

22 “(5) evaluation of ongoing compliance with the
23 assurances and commitments, and of the predictions,
24 made by applicants pursuant to paragraphs (2) and
25 (3) of subsection (d);

1 “(6) the total number of applications received
2 by the Department each year; and

3 “(7) any other metrics the Secretary determines
4 appropriate.”.

5 **Subtitle B—Energy Information** 6 **Administration**

7 **SEC. 4101. DEFINITIONS.**

8 In this subtitle:

9 (1) ADMINISTRATOR.—The term “Adminis-
10 trator” means the Administrator of the Energy In-
11 formation Administration.

12 (2) ANNUAL CRITICAL MINERALS OUTLOOK.—
13 The term “Annual Critical Minerals Outlook” means
14 the Annual Critical Minerals Outlook prepared
15 under section 7002(j)(1)(B) of the Energy Act of
16 2020 (30 U.S.C. 1606(j)(1)(B)).

17 (3) CRITICAL MINERAL.—The term “critical
18 mineral” has the meaning given the term in section
19 7002(a) of the Energy Act of 2020 (30 U.S.C.
20 1606(a)).

21 (4) HOUSEHOLD ENERGY BURDEN.—The term
22 “household energy burden” means the quotient ob-
23 tained by dividing—

24 (A) the residential energy expenditures (as
25 defined in section 440.3 of title 10, Code of

1 Federal Regulations (as in effect on the date of
2 enactment of this Act)) of the applicable house-
3 hold; by

4 (B) the annual income of that household.

5 (5) HOUSEHOLD WITH A HIGH ENERGY BUR-
6 DEN.—The term “household with a high energy bur-
7 den” has the meaning given the term in section
8 440.3 of title 10, Code of Federal Regulations (as
9 in effect on the date of enactment of this Act).

10 (6) LARGE MANUFACTURING FACILITY.—The
11 term “large manufacturing facility” means a manu-
12 facturing facility that—

13 (A) annually consumes more than 35,000
14 megawatt-hours of electricity; or

15 (B) has a peak power demand of more
16 than 10 megawatts.

17 (7) LOAD-SERVING ENTITY.—The term “load-
18 serving entity” has the meaning given the term in
19 section 217(a) of the Federal Power Act (16 U.S.C.
20 824q(a)).

21 (8) MISCELLANEOUS ELECTRIC LOAD.—The
22 term “miscellaneous electric load” means electricity
23 that—

24 (A) is used by an appliance or device—

25 (i) within a building; or

1 (ii) to serve a building; and

2 (B) is not used for heating, ventilation, air
3 conditioning, lighting, water heating, or refrig-
4 eration.

5 (9) REGIONAL TRANSMISSION ORGANIZATION.—

6 The term “Regional Transmission Organization”
7 has the meaning given the term in section 3 of the
8 Federal Power Act (16 U.S.C. 796).

9 (10) RURAL AREA.—The term “rural area”
10 means a city, town, or unincorporated area that has
11 a population of not more than 10,000 inhabitants.

12 **SEC. 4102. DATA COLLECTION IN THE ELECTRICITY SEC-**
13 **TOR.**

14 (a) DASHBOARD.—

15 (1) ESTABLISHMENT.—

16 (A) IN GENERAL.—Not later than 90 days
17 after the date of enactment of this Act, the Ad-
18 ministrators shall establish an online database to
19 track the operation of the bulk power system in
20 the contiguous 48 States (referred to in this
21 section as the “Dashboard”).

22 (B) IMPROVEMENT OF EXISTING DASH-
23 BOARD.—The Dashboard may be established
24 through the improvement, in accordance with

1 this subsection, of an existing dashboard of the
2 Energy Information Administration, such as—

3 (i) the U.S. Electric System Oper-
4 ating Data dashboard; or

5 (ii) the Hourly Electric Grid Monitor.

6 (2) EXPANSION.—

7 (A) IN GENERAL.—Not later than 1 year
8 after the date of enactment of this Act, the Ad-
9 ministrator shall expand the Dashboard to in-
10 clude, to the maximum extent practicable, hour-
11 ly operating data collected from the electricity
12 balancing authorities that operate the bulk
13 power system in all of the several States, each
14 territory of the United States, and the District
15 of Columbia.

16 (B) TYPES OF DATA.—The hourly oper-
17 ating data collected under subparagraph (A)
18 may include data relating to—

19 (i) total electricity demand;

20 (ii) electricity demand by subregion;

21 (iii) short-term electricity demand
22 forecasts;

23 (iv) total electricity generation;

24 (v) net electricity generation by fuel
25 type, including renewables;

- 1 (vi) electricity stored and discharged;
2 (vii) total net electricity interchange;
3 (viii) electricity interchange with di-
4 rectly interconnected balancing authorities;
5 and
6 (ix) the estimated marginal green-
7 house gas emissions per megawatt hour of
8 electricity generated—
9 (I) within the metered boundaries
10 of each balancing authority; and
11 (II) for each pricing node.

12 (b) MIX OF ENERGY SOURCES.—

13 (1) IN GENERAL.—Not later than 1 year after
14 the date of enactment of this Act, the Administrator
15 shall establish, in accordance with section 4109 and
16 this subsection, a system to harmonize the operating
17 data on electricity generation collected under sub-
18 section (a) with—

19 (A) measurements of greenhouse gas and
20 other pollutant emissions collected by the Envi-
21 ronmental Protection Agency;

22 (B) other data collected by the Environ-
23 mental Protection Agency or other relevant
24 Federal agencies, as the Administrator deter-
25 mines to be appropriate; and

1 (C) data collected by State or regional en-
2 ergy credit registries.

3 (2) OUTCOMES.—The system established under
4 paragraph (1) shall result in an integrated dataset
5 that includes, for any given time—

6 (A) the net generation of electricity by
7 megawatt hour within the metered boundaries
8 of each balancing authority; and

9 (B) the average and marginal greenhouse
10 gas emissions by megawatt hour of electricity
11 generated within the metered boundaries of
12 each balancing authority.

13 (3) REAL-TIME DATA DISSEMINATION.—To the
14 maximum extent practicable, the system established
15 under paragraph (1) shall disseminate data on a
16 real-time basis.

17 (4) COMPLEMENTARY EFFORTS.—The system
18 established under paragraph (1) shall complement
19 any existing data dissemination efforts of the Ad-
20 ministrator that make use of electricity generation
21 data, such as electricity demand by subregion and
22 electricity interchange with directly interconnected
23 balancing authorities.

24 (c) OBSERVED CHARACTERISTICS OF BULK POWER
25 SYSTEM RESOURCE INTEGRATION.—

1 (1) IN GENERAL.—Not later than 1 year after
2 the date of enactment of this Act, the Administrator
3 shall establish a system to provide to the public
4 timely data on the integration of energy resources
5 into the bulk power system and the electric distribu-
6 tion grids in the United States, and the observed ef-
7 fects of that integration.

8 (2) REQUIREMENTS.—In carrying out para-
9 graph (1), the Administrator shall seek to improve
10 the temporal and spatial resolution of data relating
11 to how grid operations are changing, such as
12 through—

13 (A) thermal generator cycling to accommo-
14 date intermittent generation;

15 (B) generation unit self-scheduling prac-
16 tices;

17 (C) renewable source curtailment;

18 (D) utility-scale storage;

19 (E) load response;

20 (F) aggregations of distributed energy re-
21 sources at the distribution system level;

22 (G) power interchange between directly
23 connected balancing authorities;

24 (H) expanding Regional Transmission Or-
25 ganization balancing authorities;

- 1 (I) improvements in real-time—
2 (i) accuracy of locational marginal
3 prices; and
4 (ii) signals to flexible demand; and
5 (J) disruptions to grid operations, includ-
6 ing disruptions caused by cyber sources, phys-
7 ical sources, extreme weather events, or other
8 sources.

9 (d) DISTRIBUTION SYSTEM OPERATIONS.—

10 (1) IN GENERAL.—Not later than 1 year after
11 the date of enactment of this Act, the Administrator
12 shall establish a system to provide to the public
13 timely data on the operations of load-serving entities
14 in the electricity grids of the United States.

15 (2) REQUIREMENTS.—

16 (A) IN GENERAL.—In carrying out para-
17 graph (1), the Administrator shall—

18 (i) not less frequently than annually,
19 provide data on—

20 (I) the delivered generation re-
21 source mix for each load-serving enti-
22 ty; and

23 (II) the distributed energy re-
24 sources operating within each service
25 area of a load-serving entity;

1 (ii) harmonize the data on delivered
2 generation resource mix described in clause
3 (i)(I) with measurements of greenhouse
4 gas emissions collected by the Environ-
5 mental Protection Agency;

6 (iii) to the maximum extent prac-
7 ticable, disseminate the data described in
8 clause (i)(I) and the harmonized data de-
9 scribed in clause (ii) on a real-time basis;
10 and

11 (iv) provide historical data, beginning
12 with the earliest calendar year practicable,
13 but not later than calendar year 2020, on
14 the delivered generation resource mix de-
15 scribed in clause (i)(I).

16 (B) DATA ON THE DELIVERED GENERA-
17 TION RESOURCE MIX.—In collecting the data
18 described in subparagraph (A)(i)(I), the Admin-
19 istrator shall—

20 (i) use existing voluntary industry
21 methodologies, including reporting proto-
22 cols and databases that provide consistent,
23 timely, and accessible carbon emissions in-
24 tensity rates for delivered electricity;

1 (ii) consider that generation and
2 transmission entities may provide data on
3 behalf of load-serving entities;

4 (iii) to the extent that the Adminis-
5 trator determines necessary, require each
6 load-serving entity to submit additional in-
7 formation as needed to determine the deliv-
8 ered generation resource mix of the load-
9 serving entity, including financial or con-
10 tractual agreements for power and genera-
11 tion resource type attributes with respect
12 to power owned by or retired by the load-
13 serving entity; and

14 (iv) for any portion of the generation
15 resource mix of a load-serving entity that
16 is otherwise unaccounted for, develop a
17 methodology to assign to the load-serving
18 entity a share of the otherwise unac-
19 counted for resource mix of the relevant
20 balancing authority.

21 (3) CITY-LEVEL DATA.—Not later than 1 year
22 after the date of enactment of this Act, the Adminis-
23 trator shall develop a plan for the collection or esti-
24 mation of data on the electricity consumption within
25 the city limits of cities in the United States.

1 **SEC. 4103. EXPANSION OF ENERGY CONSUMPTION SUR-**
2 **VEYS.**

3 (a) IN GENERAL.—Not later than 2 years after the
4 date of enactment of this Act, the Administrator shall im-
5 plement measures to expand the Manufacturing Energy
6 Consumption Survey, the Commercial Building Energy
7 Consumption Survey, and the Residential Energy Con-
8 sumption Survey to include data on energy end use in
9 order to facilitate the identification of—

10 (1) opportunities to improve energy efficiency
11 and energy productivity;

12 (2) changing patterns of energy use; and

13 (3) opportunities to better understand and
14 manage miscellaneous electric loads.

15 (b) REQUIREMENTS.—

16 (1) IN GENERAL.—In carrying out subsection
17 (a), the Administrator shall—

18 (A) increase the scope and frequency of
19 data collection on energy end uses and services;

20 (B) use new data collection methods and
21 tools in order to obtain more comprehensive
22 data and reduce the burden on survey respond-
23 ents, including by—

24 (i) accessing other existing data
25 sources; and

1 (ii) if feasible, developing online and
2 real-time reporting systems;

3 (C) identify and report community-level
4 economic and environmental impacts, including
5 with respect to—

6 (i) the reliability and security of the
7 energy supply; and

8 (ii) local areas with households with a
9 high energy burden; and

10 (D) improve the presentation of data, in-
11 cluding by—

12 (i) enabling the presentation of data
13 in an interactive cartographic format on a
14 national, regional, State, and local level
15 with the functionality of viewing various
16 economic, energy, and demographic meas-
17 ures on an individual basis or in combina-
18 tion; and

19 (ii) incorporating the results of the
20 data collection, methods, and tools de-
21 scribed in subparagraphs (A) and (B) into
22 existing and new digital distribution meth-
23 ods.

1 (2) MANUFACTURING ENERGY CONSUMPTION
2 SURVEY.—With respect to the Manufacturing En-
3 ergy Consumption Survey, the Administrator shall—

4 (A) implement measures to provide more
5 detailed representations of data by region;

6 (B) for large manufacturing facilities,
7 break out process heat use by required process
8 temperatures in order to facilitate the identi-
9 fication of opportunities for cost reductions and
10 energy efficiency or energy productivity im-
11 provements;

12 (C) collect information on—

13 (i) energy source-switching capabili-
14 ties, especially with respect to thermal
15 processes and the efficiency of thermal
16 processes;

17 (ii) the use of electricity, biofuels, hy-
18 drogen, or other alternative fuels to
19 produce process heat; and

20 (iii) the use of demand response; and

21 (D) identify current and potential future
22 industrial clusters in which multiple firms and
23 facilities in a defined geographic area share the
24 costs and benefits of infrastructure for clean
25 manufacturing, such as—

1 (i) hydrogen generation, production,
2 transport, use, and storage infrastructure;
3 and

4 (ii) carbon dioxide capture, transport,
5 use, and storage infrastructure.

6 (3) RESIDENTIAL ENERGY CONSUMPTION SUR-
7 VEY.—With respect to the Residential Energy Con-
8 sumption Survey, the Administrator shall—

9 (A) implement measures to provide more
10 detailed representations of data by—

11 (i) geographic area, including by State
12 (for each State);

13 (ii) building type, including multi-fam-
14 ily buildings;

15 (iii) household income;

16 (iv) location in a rural area; and

17 (v) other demographic characteristics,
18 as determined by the Administrator; and

19 (B) report measures of—

20 (i) household electrical service capac-
21 ity;

22 (ii) access to utility demand-side man-
23 agement programs and bill credits;

24 (iii) the affordability of energy; and

260

1 (iv) the household energy burden for
2 households—

3 (I) in different geographic areas;

4 (II) by electricity, heating, and
5 other end-uses; and

6 (III) with different demographic
7 characteristics that correlate with in-
8 creased household energy burden, in-
9 cluding—

10 (aa) having a low household
11 income;

12 (bb) being a minority house-
13 hold;

14 (cc) residing in manufac-
15 tured or multifamily housing;

16 (dd) residing in rental hous-
17 ing; and

18 (ee) other factors, as deter-
19 mined by the Administrator.

20 **SEC. 4104. DATA COLLECTION ON ELECTRIC VEHICLE INTE-**
21 **GRATION WITH THE ELECTRICITY GRIDS.**

22 (a) IN GENERAL.—Not later than 1 year after the
23 date of enactment of this Act, the Administrator shall de-
24 velop and implement measures to expand data collection

1 with respect to bi-directional electric vehicle integration
2 with the electricity grids.

3 (b) SOURCES OF DATA.—The sources of the data col-
4 lected pursuant to subsection (a) may include—

5 (1) host-owned or charging-network-owned elec-
6 tric vehicle charging stations;

7 (2) aggregators of charging-network electricity
8 demand;

9 (3) electric utilities offering managed-charging
10 programs;

11 (4) electric utility coalitions;

12 (5) individual, corporate, or public owners of
13 electric vehicles; and

14 (6) balancing authority analyses of—

15 (A) transformer loading congestion; and

16 (B) distribution-system congestion.

17 (c) CONSULTATION AND COORDINATION.—In car-
18 rying out subsection (a), the Administrator may consult
19 and enter into agreements with other institutions having
20 relevant data and data collection capabilities, such as—

21 (1) the Secretary of Transportation;

22 (2) the Secretary;

23 (3) the Administrator of the Environmental
24 Protection Agency;

25 (4) States or State agencies; and

1 (5) private entities.

2 **SEC. 4105. PLAN FOR THE FORECASTING OF DEMAND FOR**
3 **MINERALS USED IN THE ENERGY SECTOR.**

4 (a) IN GENERAL.—Not later than 180 days after the
5 date of enactment of this Act, the Administrator shall de-
6 velop a plan for the forecasting of demand for energy
7 equipment, including equipment for energy production or
8 storage purposes, that uses minerals, such as lithium and
9 cobalt, that are or potentially may be determined to be
10 critical minerals, including—

11 (1) existing markets for manufactured energy-
12 producing and energy-storing equipment; and

13 (2) emerging or potential markets for new en-
14 ergy-producing and energy-storing technologies en-
15 tering commercialization.

16 (b) METRICS.—The plan developed under subsection
17 (a) shall produce forecasts of equipment demand—

18 (1) over the 1-year, 5-year, and 10-year periods
19 beginning on the date on which development of the
20 plan is completed;

21 (2) by particular economic sectors; and

22 (3) according to any other parameters that the
23 Administrator, in collaboration with the Secretary of
24 the Interior, acting through the Director of the

1 United States Geological Survey, determines are
2 needed for the Annual Critical Minerals Outlook.

3 (c) COLLABORATION.—In carrying out subsection
4 (a), the Administrator shall work with—

5 (1) the Secretary with respect to the possible
6 trajectories of emerging energy-producing and en-
7 ergy-storing technologies; and

8 (2) the Secretary of the Interior, acting through
9 the Director of the United States Geological Survey,
10 with respect to the parameters and assessments
11 needed for the Annual Critical Minerals Outlook.

12 **SEC. 4106. EXPANSION OF INTERNATIONAL ENERGY DATA.**

13 (a) IN GENERAL.—Not later than 1 year after the
14 date of enactment of this Act, the Administrator shall im-
15 plement measures to expand and improve the international
16 energy data resources of the Energy Information Adminis-
17 tration in order to understand—

18 (1) the production and use of energy in various
19 countries;

20 (2) changing patterns of energy use internation-
21 ally;

22 (3) the relative costs and environmental impacts
23 of energy production and use internationally; and

24 (4) plans for or construction of major energy
25 facilities or infrastructure.

1 (b) REQUIREMENTS.—In carrying out subsection (a),
2 the Administrator shall—

3 (1) work with, and leverage the data resources
4 of, the International Energy Agency;

5 (2) include detail on energy consumption by
6 fuel, economic sector, and end use within countries
7 for which data are available;

8 (3) collect relevant measures of energy use, in-
9 cluding—

10 (A) cost; and

11 (B) emissions intensity; and

12 (4) provide tools that allow for straightforward
13 country-to-country comparisons of energy production
14 and consumption across economic sectors and end
15 uses.

16 **SEC. 4107. PLAN FOR THE NATIONAL ENERGY MODELING**
17 **SYSTEM.**

18 Not later than 180 days after the date of enactment
19 of this Act, the Administrator shall develop a plan to iden-
20 tify any need or opportunity to update or further the capa-
21 bilities of the National Energy Modeling System, including
22 with respect to—

23 (1) treating energy demand endogenously;

24 (2) increased natural gas usage and increased
25 market penetration of renewable energy;

1 (3) flexible operating modes of nuclear power
2 plants, such as load following and frequency control;

3 (4) tools to model multiple-output energy sys-
4 tems that provide hydrogen, high-value heat, elec-
5 tricity, and chemical synthesis services, including
6 interactions of those energy systems with the elec-
7 tricity grids, pipeline networks, and the broader
8 economy;

9 (5) demand response and improved representa-
10 tion of energy storage, including long-duration stor-
11 age, in capacity expansion models;

12 (6) electrification, particularly with respect to
13 the transportation, industrial, and buildings sectors;

14 (7) increasing model resolution to represent all
15 hours of the year and all electricity generators;

16 (8) wholesale electricity market design and the
17 appropriate valuation of all services that support the
18 reliability of electricity grids, such as—

19 (A) battery storage; and

20 (B) synthetic inertia from grid-tied invert-
21 ers;

22 (9) economic modeling of the role of energy effi-
23 ciency, demand response, electricity storage, and a
24 variety of distributed generation technologies;

- 1 (10) the production, transport, use, and storage
2 of carbon dioxide, hydrogen, and hydrogen carriers;
- 3 (11) greater flexibility in—
- 4 (A) the modeling of the environmental im-
5 pacts of electricity systems, such as—
- 6 (i) emissions of greenhouse gases and
7 other pollutants; and
- 8 (ii) the use of land and water re-
9 sources; and
- 10 (B) the ability to support climate mod-
11 eling, such as the climate modeling performed
12 by the Office of Biological and Environmental
13 Research in the Office of Science of the Depart-
14 ment;
- 15 (12) technologies that are in an early stage of
16 commercial deployment and have been identified by
17 the Secretary as candidates for large-scale dem-
18 onstration projects, such as—
- 19 (A) carbon capture, transport, use, and
20 storage from any source or economic sector;
- 21 (B) direct air capture;
- 22 (C) hydrogen production, including via
23 electrolysis;
- 24 (D) synthetic and biogenic hydrocarbon
25 liquid and gaseous fuels;

1 (E) supercritical carbon dioxide combus-
2 tion turbines;

3 (F) industrial fuel cell and hydrogen com-
4 bustion equipment; and

5 (G) industrial electric boilers;

6 (13) increased and improved data sources and
7 tools, including—

8 (A) the establishment of technology and
9 cost baselines, including technology learning
10 rates;

11 (B) economic, employment, and health im-
12 pacts of energy system policies on households,
13 as a function of household income and region;
14 and

15 (C) the use of behavioral economics to in-
16 form demand modeling in all sectors; and

17 (14) striving to migrate toward a single, con-
18 sistent, and open-source modeling platform, and in-
19 creasing open access to model systems, data, and
20 outcomes, for—

21 (A) disseminating reference scenarios that
22 can be transparently and broadly replicated;
23 and

24 (B) promoting the development of the re-
25 searcher and analyst workforce needed to con-

1 tinue the development and validation of im-
2 proved energy system models in the future.

3 **SEC. 4108. REPORT ON COSTS OF CARBON ABATEMENT IN**
4 **THE ELECTRICITY SECTOR.**

5 Not later than 270 days after the date of enactment
6 of this Act, the Administrator shall submit to Congress
7 a report on—

8 (1) the potential use of levelized cost of carbon
9 abatement (referred to in this section as “LCCA”)
10 or a similar metric in analyzing generators of elec-
11 tricity;

12 (2) the feasibility and impact of incorporating
13 LCCA in long-term forecasts—

14 (A) to compare technical approaches and
15 understand real-time changes in fossil-fuel and
16 nuclear dispatch;

17 (B) to compare the costs of technology op-
18 tions to reduce emissions; and

19 (C) to compare the costs of policy options,
20 including current policies, regarding valid and
21 verifiable reductions and removals of carbon;
22 and

23 (3)(A) a potential process to measure carbon
24 dioxide emissions intensity per unit of output pro-
25 duction for a range of—

- 1 (i) energy sources;
- 2 (ii) sectors; and
- 3 (iii) geographic regions; and
- 4 (B) a corresponding process to provide an em-
5 pirical framework for reporting the status and costs
6 of carbon dioxide reduction relative to specified
7 goals.

8 **SEC. 4109. HARMONIZATION OF EFFORTS AND DATA.**

9 Not later than 1 year after the date of enactment
10 of this Act, the Administrator shall establish a system to
11 harmonize, to the maximum extent practicable—

12 (1) the data collection efforts of the Adminis-
13 trator, including any data collection required under
14 this subtitle, with the data collection efforts of—

15 (A) the Environmental Protection Agency;

16 (B) other relevant Federal agencies, as the
17 Administrator determines to be appropriate;
18 and

19 (C) State or regional energy credit reg-
20 istries, as the Administrator determines to be
21 appropriate;

22 (2) the data collected under this subtitle, in-
23 cluding the operating data on electricity generation
24 collected under section 4102(a), with data collected
25 by the entities described in subparagraphs (A)

1 through (C) of paragraph (1), including any meas-
2 urements of greenhouse gas and other pollutant
3 emissions collected by the Environmental Protection
4 Agency; and

5 (3) the efforts of the Administrator to identify
6 and report relevant impacts, opportunities, and pat-
7 terns with respect to energy use, including the iden-
8 tification of community-level economic and environ-
9 mental impacts required under section
10 4103(b)(1)(C), with the efforts of the Environmental
11 Protection Agency and other relevant Federal agen-
12 cies, as determined by the Administrator, to identify
13 similar impacts, opportunities, and patterns.

14 **Subtitle C—Miscellaneous**

15 **SEC. 4201. CONSIDERATION OF MEASURES TO PROMOTE** 16 **GREATER ELECTRIFICATION OF THE TRANS-** 17 **PORTATION SECTOR.**

18 (a) IN GENERAL.—Section 111(d) of the Public Util-
19 ity Regulatory Policies Act of 1978 (16 U.S.C. 2621(d))
20 (as amended by section 1004(a)(1)) is amended by adding
21 at the end the following:

22 “(21) ELECTRIC VEHICLE CHARGING PRO-
23 GRAMS.—Each State shall consider measures to pro-
24 mote greater electrification of the transportation sec-
25 tor, including the establishment of rates that—

1 “(A) promote affordable and equitable
2 electric vehicle charging options for both resi-
3 dential and public electric vehicle charging in-
4 frastructure;

5 “(B) facilitate reduced charging times for
6 light-, medium-, and heavy-duty vehicles to im-
7 prove customer experiences;

8 “(C) accelerate third-party investment in
9 public electric vehicle charging stations in order
10 to reduce greenhouse gas emissions in the light-
11 , medium-, and heavy-duty vehicle sectors; and

12 “(D) appropriately recover the marginal
13 costs of delivering electricity to electric vehicles
14 and electric vehicle charging infrastructure.”.

15 (b) COMPLIANCE.—

16 (1) TIME LIMITATION.—Section 112(b) of the
17 Public Utility Regulatory Policies Act of 1978 (16
18 U.S.C. 2622(b)) (as amended by section
19 1004(a)(2)(A)) is amended by adding at the end the
20 following:

21 “(8)(A) Not later than 1 year after the date of
22 enactment of this paragraph, each State regulatory
23 authority (with respect to each electric utility for
24 which the State has ratemaking authority) and each
25 nonregulated utility shall commence consideration

1 under section 111, or set a hearing date for consid-
2 eration, with respect to the standard established by
3 paragraph (21) of section 111(d).

4 “(B) Not later than 2 years after the date of
5 enactment of this paragraph, each State regulatory
6 authority (with respect to each electric utility for
7 which the State has ratemaking authority), and each
8 nonregulated electric utility shall complete the con-
9 sideration and make the determination under section
10 111 with respect to the standard established by
11 paragraph (21) of section 111(d).”.

12 (2) FAILURE TO COMPLY.—Section 112(c) of
13 the Public Utility Regulatory Policies Act of 1978
14 (16 U.S.C. 2622(c)) (as amended by section
15 1004(a)(2)(B)(i)) is amended by adding at the end
16 the following: “In the case of the standard estab-
17 lished by paragraph (21) of section 111(d), the ref-
18 erence contained in this subsection to the date of en-
19 actment of this Act shall be deemed to be a ref-
20 erence to the date of enactment of that paragraph
21 (21).”.

22 (3) PRIOR STATE ACTIONS.—

23 (A) IN GENERAL.—Section 112 of the
24 Public Utility Regulatory Policies Act of 1978
25 (16 U.S.C. 2622) (as amended by section

1 1004(a)(2)(C)(i)) is amended by adding at the
2 end the following:

3 “(h) OTHER PRIOR STATE ACTIONS.—Subsections
4 (b) and (c) shall not apply to the standard established by
5 paragraph (21) of section 111(d) in the case of any elec-
6 tric utility in a State if, before the date of enactment of
7 this subsection—

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

10 “(2) the State regulatory authority for the
11 State or the relevant nonregulated electric utility has
12 conducted a proceeding to consider implementation
13 of the standard (or a comparable standard) for the
14 electric utility; or

15 “(3) the State legislature has voted on the im-
16 plementation of the standard (or a comparable
17 standard) for the electric utility during the 3-year
18 period ending on that date of enactment.”.

19 (B) CROSS-REFERENCE.—Section 124 of
20 the Public Utility Regulatory Policies Act of
21 1978 (16 U.S.C. 2634) (as amended by section
22 1004(a)(2)(C)(ii)(II)) is amended by adding at
23 the end the following: “In the case of the stand-
24 ard established by paragraph (21) of section
25 111(d), the reference contained in this section

1 to the date of enactment of this Act shall be
2 deemed to be a reference to the date of enact-
3 ment of that paragraph (21).”.

4 **TITLE V—ENERGY EFFICIENCY**
5 **AND BUILDING INFRASTRUC-**
6 **TURE**

7 **Subtitle A—Residential and**
8 **Commercial Energy Efficiency**

9 **SEC. 5001. DEFINITIONS.**

10 In this subtitle:

11 (1) **PRIORITY STATE.**—The term “priority
12 State” means a State that—

13 (A) is eligible for funding under the State
14 Energy Program; and

15 (B)(i) is among the 15 States with the
16 highest annual per-capita combined residential
17 and commercial sector energy consumption, as
18 most recently reported by the Energy Informa-
19 tion Administration; or

20 (ii) is among the 15 States with the high-
21 est annual per-capita energy-related carbon di-
22 oxide emissions by State, as most recently re-
23 ported by the Energy Information Administra-
24 tion.

1 grants to States that are eligible for funding
2 under the State Energy Program, in accordance
3 with the allocation formula established under
4 section 420.11 of title 10, Code of Federal Reg-
5 ulations (or successor regulations).

6 (B) REMAINING FUNDING.—After applying
7 the allocation formula described in subpara-
8 graph (A), the Secretary shall redistribute any
9 unclaimed funds to the remaining States seek-
10 ing capitalization grants under that subpara-
11 graph.

12 (2) PRIORITY STATES.—

13 (A) IN GENERAL.—Of the amounts made
14 available under subsection (j), the Secretary
15 shall use 60 percent to provide supplemental
16 capitalization grants to priority States in ac-
17 cordance with an allocation formula determined
18 by the Secretary.

19 (B) REMAINING FUNDING.—After applying
20 the allocation formula described in subpara-
21 graph (A), the Secretary shall redistribute any
22 unclaimed funds to the remaining priority
23 States seeking supplemental capitalization
24 grants under that subparagraph.

25 (C) GRANT AMOUNT.—

1 (i) MAXIMUM AMOUNT.—The amount
2 of a supplemental capitalization grant pro-
3 vided to a State under this paragraph shall
4 not exceed \$15,000,000.

5 (ii) SUPPLEMENT NOT SUPPLANT.—A
6 supplemental capitalization grant received
7 by a State under this paragraph shall sup-
8 plement, not supplant, a capitalization
9 grant received by that State under para-
10 graph (1).

11 (c) APPLICATIONS FOR CAPITALIZATION GRANTS.—
12 A State seeking a capitalization grant under the program
13 shall submit to the Secretary an application at such time,
14 in such manner, and containing such information as the
15 Secretary may require, including—

16 (1) a detailed explanation of how the grant will
17 be used, including a plan to establish a new revolv-
18 ing loan fund or use an existing revolving loan fund;

19 (2) the need of eligible recipients for loans and
20 grants in the State for assistance with conducting
21 energy audits;

22 (3) a description of the expected benefits that
23 building infrastructure and energy system upgrades
24 and retrofits will have on communities in the State;
25 and

1 (4) in the case of a priority State seeking a
2 supplemental capitalization grant under subsection
3 (b)(2), a justification for needing the supplemental
4 funding.

5 (d) TIMING.—

6 (1) IN GENERAL.—The Secretary shall establish
7 a timeline with dates by, or periods by the end of,
8 which a State shall—

9 (A) on receipt of a capitalization grant
10 under the program, deposit the grant funds into
11 a revolving loan fund; and

12 (B) begin using the capitalization grant as
13 described in subsection (e)(1).

14 (2) USE OF GRANT.—Under the timeline estab-
15 lished under paragraph (1), a State shall be required
16 to begin using a capitalization grant not more than
17 180 days after the date on which the grant is re-
18 ceived.

19 (e) USE OF GRANT FUNDS.—

20 (1) IN GENERAL.—A State that receives a cap-
21 italization grant under the program—

22 (A) shall provide loans in accordance with
23 paragraph (2); and

24 (B) may provide grants in accordance with
25 paragraph (3).

1 (2) LOANS.—

2 (A) COMMERCIAL ENERGY AUDIT.—

3 (i) IN GENERAL.—A State that re-
4 ceives a capitalization grant under the pro-
5 gram may provide a loan to an eligible re-
6 cipient described in clause (iii) to conduct
7 a commercial energy audit.

8 (ii) AUDIT REQUIREMENTS.—A com-
9 mercial energy audit conducted using a
10 loan provided under clause (i) shall—

11 (I) determine the overall con-
12 sumption of energy of the facility of
13 the eligible recipient;

14 (II) identify and recommend
15 lifecycle cost-effective opportunities to
16 reduce the energy consumption of the
17 facility of the eligible recipient, includ-
18 ing through energy efficient—

19 (aa) lighting;

20 (bb) heating, ventilation,
21 and air conditioning systems;

22 (cc) windows;

23 (dd) appliances; and

24 (ee) insulation and building
25 envelopes;

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1 (III) estimate the energy and
2 cost savings potential of the opportu-
3 nities identified in subclause (II)
4 using software approved by the Sec-
5 retary;

6 (IV) identify—

7 (aa) the period and level of
8 peak energy demand for each
9 building within the facility of the
10 eligible recipient; and

11 (bb) the sources of energy
12 consumption that are contrib-
13 uting the most to that period of
14 peak energy demand;

15 (V) recommend controls and
16 management systems to reduce or re-
17 distribute peak energy consumption;
18 and

19 (VI) estimate the total energy
20 and cost savings potential for the fa-
21 cility of the eligible recipient if all rec-
22 ommended upgrades and retrofits are
23 implemented, using software approved
24 by the Secretary.

1 (iii) ADDITIONAL AUDIT INCLU-
2 SIONS.—A commercial energy audit con-
3 ducted using a loan provided under clause
4 (i) may recommend strategies to increase
5 energy efficiency of the facility of the eligi-
6 ble recipient through use of electric sys-
7 tems or other high-efficiency systems uti-
8 lizing fuels, such as natural gas and hydro-
9 gen.

10 (iv) ELIGIBLE RECIPIENTS.—An eligi-
11 ble recipient under clause (i) is a business
12 that—

13 (I) conducts the majority of its
14 business in the State that provides the
15 loan under that clause; and

16 (II) owns or operates—

17 (aa) 1 or more commercial
18 buildings; or

19 (bb) commercial space with-
20 in a building that serves multiple
21 functions, such as a building for
22 commercial and residential oper-
23 ations.

24 (B) RESIDENTIAL ENERGY AUDITS.—

1 (i) IN GENERAL.—A State that re-
2 ceives a capitalization grant under the pro-
3 gram may provide a loan to an eligible re-
4 cipient described in clause (iii) to conduct
5 a residential energy audit.

6 (ii) RESIDENTIAL ENERGY AUDIT RE-
7 QUIREMENTS.—A residential energy audit
8 conducted using a loan under clause (i)
9 shall—

10 (I) utilize the same evaluation
11 criteria as the Home Performance As-
12 sessment used in the Energy Star
13 program established under section
14 324A of the Energy Policy and Con-
15 servation Act (42 U.S.C. 6294a);

16 (II) recommend lifecycle cost-ef-
17 fective opportunities to reduce energy
18 consumption within the residential
19 building of the eligible recipient, in-
20 cluding through energy efficient—

21 (aa) lighting;

22 (bb) heating, ventilation,
23 and air conditioning systems;

24 (cc) windows;

25 (dd) appliances; and

1 (ee) insulation and building
2 envelopes;

3 (III) recommend controls and
4 management systems to reduce or re-
5 distribute peak energy consumption;

6 (IV) compare the energy con-
7 sumption of the residential building of
8 the eligible recipient to comparable
9 residential buildings in the same geo-
10 graphic area; and

11 (V) provide a Home Energy
12 Score, or equivalent score, for the res-
13 idential building of the eligible recipi-
14 ent by using the Home Energy Score
15 Tool of the Department or an equiva-
16 lent scoring tool.

17 (iii) ADDITIONAL AUDIT INCLU-
18 SIONS.—A residential energy audit con-
19 ducted using a loan provided under clause
20 (i) may recommend strategies to increase
21 energy efficiency of the facility of the eligi-
22 ble recipient through use of electric sys-
23 tems or other high-efficiency systems uti-
24 lizing fuels like, but not limited to, natural
25 gas and hydrogen.

1 (iv) ELIGIBLE RECIPIENTS.—An eligi-
2 ble recipient under clause (i) is—

3 (I) an individual who owns—

4 (aa) a single family home;

5 (bb) a condominium or du-
6 plex; or

7 (cc) a manufactured housing
8 unit; or

9 (II) a business that owns or oper-
10 ates a multifamily housing facility.

11 (C) COMMERCIAL AND RESIDENTIAL EN-
12 ERGY UPGRADES AND RETROFITS.—

13 (i) IN GENERAL.—A State that re-
14 ceives a capitalization grant under the pro-
15 gram may provide a loan to an eligible re-
16 cipient described in clause (ii) to carry out
17 upgrades or retrofits of building infrastruc-
18 ture and systems that—

19 (I) are recommended in the com-
20 mercial energy audit or residential en-
21 ergy audit, as applicable, completed
22 for the building or facility of the eligi-
23 ble recipient;

24 (II) satisfy at least 1 of the cri-
25 teria in the Home Performance As-

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1 assessment used in the Energy Star
2 program established under section
3 324A of the Energy Policy and Con-
4 servation Act (42 U.S.C. 6294a);

5 (III) improve, with respect to the
6 building or facility of the eligible re-
7 cipient—

8 (aa) the physical comfort of
9 the building or facility occupants;

10 (bb) the energy efficiency of
11 the building or facility; or

12 (cc) the quality of the air in
13 the building or facility; and

14 (IV)(aa) are lifecycle cost-effec-
15 tive; and

16 (bb)(AA) reduce the energy in-
17 tensity of the building or facility of
18 the eligible recipient; or

19 (BB) improve the control and
20 management of energy usage of the
21 building or facility to reduce demand
22 during peak times.

23 (ii) **ELIGIBLE RECIPIENTS.**—An eligi-
24 ble recipient under clause (i) is an eligible

1 recipient described in subparagraph (A)(iii)
2 or (B)(iii) that—

3 (I) has completed a commercial
4 energy audit described in subpara-
5 graph (A) or a residential energy
6 audit described in subparagraph (B)
7 using a loan provided under the appli-
8 cable subparagraph; or

9 (II) has completed a commercial
10 energy audit or residential energy
11 audit that—

12 (aa) was not funded by a
13 loan under this paragraph; and

14 (bb)(AA) meets the require-
15 ments for the applicable audit
16 under subparagraph (A) or (B),
17 as applicable; or

18 (BB) the Secretary deter-
19 mines is otherwise satisfactory.

20 (iii) LOAN TERM.—A loan provided
21 under this subparagraph shall be required
22 to be fully amortized by the earlier of—

23 (I) the year in which the up-
24 grades or retrofits carried out using

1 the loan exceed their expected useful
2 life; and

3 (II) 15 years after those up-
4 grades or retrofits are installed.

5 (D) REFERRAL TO QUALIFIED CONTRAC-
6 TORS.—Following the completion of an audit
7 under subparagraph (A) or (B) by an eligible
8 recipient of a loan under the applicable sub-
9 paragraph, the State may refer the eligible re-
10 cipient to a qualified contractor, as determined
11 by the State, to estimate—

12 (i) the upfront capital cost of each
13 recommended upgrade; and

14 (ii) the total upfront capital cost of
15 implementing all recommended upgrades.

16 (E) LOAN RECIPIENTS.—Each State pro-
17 viding loans under this paragraph shall, to the
18 maximum extent practicable, provide loans to
19 eligible recipients that do not have access to
20 private capital.

21 (3) GRANTS AND TECHNICAL ASSISTANCE.—

22 (A) IN GENERAL.—A State that receives a
23 capitalization grant under the program may use
24 not more than 25 percent of the grant funds to
25 provide grants or technical assistance to eligible

1 entities described in subparagraph (B) to carry
2 out the activities described in subparagraphs
3 (A), (B), and (C) of paragraph (2).

4 (B) ELIGIBLE ENTITY.—An entity eligible
5 for a grant or technical assistance under sub-
6 paragraph (A) is—

7 (i) a business that—

8 (I) is an eligible recipient de-
9 scribed in paragraph (2)(A)(iii); and

10 (II) has fewer than 500 employ-
11 ees; or

12 (ii) a low-income individual (as de-
13 fined in section 3 of the Workforce Innova-
14 tion and Opportunity Act (29 U.S.C.
15 3102)) that owns a residential building.

16 (4) ADMINISTRATIVE EXPENSES.—A State that
17 receives a capitalization grant under the program
18 may use not more than 10 percent of the grant
19 funds for administrative expenses.

20 (f) COORDINATION WITH EXISTING PROGRAMS.—A
21 State receiving a capitalization grant under the program
22 is encouraged to utilize and build on existing programs
23 and infrastructure within the State that may aid the State
24 in carrying out a revolving loan fund program.

1 (g) LEVERAGING PRIVATE CAPITAL.—A State receiv-
2 ing a capitalization grant under the program shall, to the
3 maximum extent practicable, use the grant to leverage pri-
4 vate capital.

5 (h) OUTREACH.—The Secretary shall engage in out-
6 reach to inform States of the availability of capitalization
7 grants under the program.

8 (i) REPORT.—Each State that receives a capitaliza-
9 tion grant under the program shall, not later than 1 year
10 after a grant is received, submit to the Secretary a report
11 that describes—

12 (1) the number of recipients to which the State
13 has distributed—

14 (A) loans for—

15 (i) commercial energy audits under
16 subsection (e)(2)(A);

17 (ii) residential energy audits under
18 subsection (e)(2)(B);

19 (iii) energy upgrades and retrofits
20 under subsection (e)(2)(C); and

21 (B) grants under subsection (e)(3); and

22 (2) the average capital cost of upgrades and
23 retrofits across all commercial energy audits and
24 residential energy audits that were conducted in the

1 State using loans provided by the State under sub-
2 section (e).

3 (j) 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, \$250,000,000 for fiscal
7 year 2022, to remain available until expended.

8 **SEC. 5003. ENERGY AUDITOR TRAINING GRANT PROGRAM.**

9 (a) DEFINITIONS.—In this section:

10 (1) COVERED CERTIFICATION.—The term “cov-
11 ered certification” means any of the following certifi-
12 cations:

13 (A) The American Society of Heating, Re-
14 frigerating and Air-Conditioning Engineers
15 Building Energy Assessment Professional cer-
16 tification.

17 (B) The Association of Energy Engineers
18 Certified Energy Auditor certification.

19 (C) The Building Performance Institute
20 Home Energy Professional Energy Auditor cer-
21 tification.

22 (D) The Residential Energy Services Net-
23 work Home Energy Rater certification.

24 (E) Any other third-party certification rec-
25 ognized by the Department.

1 (F) Any third-party certification that the
2 Secretary determines is equivalent to the certifi-
3 cations described in subparagraphs (A) through
4 (E).

5 (2) ELIGIBLE STATE.—The term “eligible
6 State” means a State that—

7 (A) has a demonstrated need for assistance
8 for training energy auditors; and

9 (B) meets any additional criteria deter-
10 mined necessary by the Secretary.

11 (b) ESTABLISHMENT.—Under the State Energy Pro-
12 gram, the Secretary shall establish a competitive grant
13 program under which the Secretary shall award grants to
14 eligible States to train individuals to conduct energy au-
15 dits or surveys of commercial and residential buildings.

16 (c) APPLICATIONS.—

17 (1) IN GENERAL.—A State seeking a grant
18 under subsection (b) shall submit to the Secretary
19 an application at such time, in such manner, and
20 containing such information as the Secretary may
21 require, including the energy auditor training pro-
22 gram plan described in paragraph (2).

23 (2) ENERGY AUDITOR TRAINING PROGRAM
24 PLAN.—An energy auditor training program plan

1 submitted with an application under paragraph (1)
2 shall include—

3 (A)(i) a proposed training curriculum for
4 energy audit trainees; and

5 (ii) an identification of the covered certifi-
6 cation that those trainees will receive on com-
7 pletion of that training curriculum;

8 (B) the expected per-individual cost of
9 training;

10 (C) a plan for connecting trainees with em-
11 ployment opportunities; and

12 (D) any additional information required by
13 the Secretary.

14 (d) AMOUNT OF GRANT.—The amount of a grant
15 awarded to an eligible State under subsection (b)—

16 (1) shall be determined by the Secretary, taking
17 into account the population of the eligible State; and

18 (2) shall not exceed \$2,000,000 for any eligible
19 State.

20 (e) USE OF FUNDS.—

21 (1) IN GENERAL.—An eligible State that re-
22 ceives a grant under subsection (b) shall use the
23 grant funds—

1 (A) to cover any cost associated with indi-
2 viduals being trained or certified to conduct en-
3 ergy audits by—

4 (i) the State; or

5 (ii) a State-certified third party train-
6 ing program; and

7 (B) subject to paragraph (2), to pay the
8 wages of a trainee during the period in which
9 the trainee receives training and certification.

10 (2) LIMITATION.—Not more than 10 percent of
11 grant funds provided under subsection (b) to an eli-
12 gible State may be used for the purpose described in
13 paragraph (1)(B).

14 (f) CONSULTATION.—In carrying out this section, the
15 Secretary shall consult with the Secretary of Labor.

16 (g) 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, \$8,000,000 for each of fis-
20 cal years 2022 through 2026.

Subtitle B—Buildings

1
2 **SEC. 5101. COST-EFFECTIVE CODES IMPLEMENTATION FOR**
3 **EFFICIENCY AND RESILIENCE.**

4 (a) IN GENERAL.—Title III of the Energy Conserva-
5 tion and Production Act (42 U.S.C. 6831 et seq.) is
6 amended by adding at the end the following:

7 **“SEC. 309. COST-EFFECTIVE CODES IMPLEMENTATION FOR**
8 **EFFICIENCY AND RESILIENCE.**

9 “(a) DEFINITIONS.—In this section:

10 “(1) ELIGIBLE ENTITY.—The term ‘eligible en-
11 tity’ means—

12 “(A) a relevant State agency, as deter-
13 mined by the Secretary, such as a State build-
14 ing code agency, State energy office, or Tribal
15 energy office; and

16 “(B) a partnership.

17 “(2) PARTNERSHIP.—The term ‘partnership’
18 means a partnership between an eligible entity de-
19 scribed in paragraph (1)(A) and 1 or more of the
20 following entities:

21 “(A) Local building code agencies.

22 “(B) Codes and standards developers.

23 “(C) Associations of builders and design
24 and construction professionals.

1 “(D) Local and utility energy efficiency
2 programs.

3 “(E) Consumer, energy efficiency, and en-
4 vironmental advocates.

5 “(F) Other entities, as determined by the
6 Secretary.

7 “(3) SECRETARY.—The term ‘Secretary’ means
8 the Secretary of Energy.

9 “(b) ESTABLISHMENT.—

10 “(1) IN GENERAL.—The Secretary shall estab-
11 lish within the Building Technologies Office of the
12 Department of Energy a program under which the
13 Secretary shall award grants on a competitive basis
14 to eligible entities to enable sustained cost-effective
15 implementation of updated building energy codes.

16 “(2) UPDATED BUILDING ENERGY CODE.—An
17 update to a building energy code under this section
18 shall include any update made available after the ex-
19 isting building energy code, even if it is not the most
20 recent updated code available.

21 “(c) CRITERIA; PRIORITY.—In awarding grants
22 under subsection (b), the Secretary shall—

23 “(1) consider—

24 “(A) prospective energy savings and plans
25 to measure the savings;

1 “(B) the long-term sustainability of those
2 measures and savings;

3 “(C) prospective benefits, and plans to as-
4 sess the benefits, including benefits relating
5 to—

6 “(i) resilience and peak load reduc-
7 tion;

8 “(ii) occupant safety and health; and

9 “(iii) environmental performance;

10 “(D) the demonstrated capacity of the eli-
11 gible entity to carry out the proposed project;
12 and

13 “(E) the need of the eligible entity for as-
14 sistance; and

15 “(2) give priority to applications from partner-
16 ships.

17 “(d) ELIGIBLE ACTIVITIES.—

18 “(1) IN GENERAL.—An eligible entity awarded
19 a grant under this section may use the grant
20 funds—

21 “(A) to create or enable State or regional
22 partnerships to provide training and materials
23 to—

24 “(i) builders, contractors and sub-
25 contractors, architects, and other design

1 and construction professionals, relating to
2 meeting updated building energy codes in a
3 cost-effective manner; and

4 “(ii) building code officials, relating to
5 improving implementation of and compli-
6 ance with building energy codes;

7 “(B) to collect and disseminate quan-
8 titative data on construction and codes imple-
9 mentation, including code pathways, perform-
10 ance metrics, and technologies used;

11 “(C) to develop and implement a plan for
12 highly effective codes implementation, including
13 measuring compliance;

14 “(D) to address various implementation
15 needs in rural, suburban, and urban areas; and

16 “(E) to implement updates in energy codes
17 for—

18 “(i) new residential and commercial
19 buildings (including multifamily buildings);
20 and

21 “(ii) additions and alterations to ex-
22 isting residential and commercial buildings
23 (including multifamily buildings).

24 “(2) RELATED TOPICS.—Training and mate-
25 rials provided using a grant under this section may

1 include information on the relationship between en-
2 ergy codes and—

3 “(A) cost-effective, high-performance, and
4 zero-net-energy buildings;

5 “(B) improving resilience, health, and safe-
6 ty;

7 “(C) water savings and other environ-
8 mental impacts; and

9 “(D) the economic impacts of energy
10 codes.

11 “(e) APPROPRIATIONS.—In addition to amounts oth-
12 erwise made available, there is appropriated to the Sec-
13 retary to carry out this section, out of any amounts in
14 the Treasury not otherwise appropriated, \$45,000,000 for
15 each of fiscal years 2022 through 2026.”.

16 (b) CONFORMING AMENDMENT.—Section 303 of the
17 Energy Conservation and Production Act (42 U.S.C.
18 6832) is amended, in the matter preceding paragraph (1),
19 by striking “As used in” and inserting “Except as other-
20 wise provided, in”.

21 **SEC. 5102. BUILDING, TRAINING, AND ASSESSMENT CEN-**
22 **TERS.**

23 (a) IN GENERAL.—The Secretary shall provide
24 grants to institutions of higher education (as defined in
25 section 101 of the Higher Education Act of 1965 (20

1 U.S.C. 1001)) and Tribal Colleges or Universities (as de-
2 fined in section 316(b) of that Act (20 U.S.C. 1059c(b)))
3 to establish building training and assessment centers—

4 (1) to identify opportunities for optimizing en-
5 ergy efficiency and environmental performance in
6 buildings;

7 (2) to promote the application of emerging con-
8 cepts and technologies in commercial and institu-
9 tional buildings;

10 (3) to train engineers, architects, building sci-
11 entists, building energy permitting and enforcement
12 officials, and building technicians in energy-efficient
13 design and operation;

14 (4) to assist institutions of higher education
15 and Tribal Colleges or Universities in training build-
16 ing technicians;

17 (5) to promote research and development for
18 the use of alternative energy sources and distributed
19 generation to supply heat and power for buildings,
20 particularly energy-intensive buildings; and

21 (6) to coordinate with and assist State-accred-
22 ited technical training centers, community colleges,
23 Tribal Colleges or Universities, and local offices of
24 the National Institute of Food and Agriculture and

1 ensure appropriate services are provided under this
2 section to each region of the United States.

3 (b) COORDINATION AND NONDUPLICATION.—

4 (1) IN GENERAL.—The Secretary shall coordi-
5 nate the program with the industrial research and
6 assessment centers program under section 457 of
7 the Energy Independence and Security Act of 2007
8 (as added by section 5201(b)) and with other Fed-
9 eral programs to avoid duplication of effort.

10 (2) COLLOCATION.—To the maximum extent
11 practicable, building, training, and assessment cen-
12 ters established under this section shall be collocated
13 with industrial assessment centers (as defined in
14 section 5211).

15 (c) APPROPRIATIONS.—In addition to amounts other-
16 wise made available, there is appropriated to the Secretary
17 to carry out this section, out of any amounts in the Treas-
18 ury not otherwise appropriated, \$10,000,000 for fiscal
19 year 2022, to remain available until expended.

20 **SEC. 5103. CAREER SKILLS TRAINING.**

21 (a) DEFINITION OF ELIGIBLE ENTITY.—In this sec-
22 tion, the term “eligible entity” means a nonprofit partner-
23 ship that—

24 (1) includes the equal participation of industry,
25 including public or private employers, and labor or-

1 organizations, including joint labor-management train-
2 ing programs;

3 (2) may include workforce investment boards,
4 community-based organizations, qualified service and
5 conservation corps, educational institutions, small
6 businesses, cooperatives, State and local veterans
7 agencies, and veterans service organizations; and

8 (3) demonstrates—

9 (A) experience in implementing and oper-
10 ating worker skills training and education pro-
11 grams;

12 (B) the ability to identify and involve in
13 training programs carried out under this sec-
14 tion, target populations of individuals who
15 would benefit from training and be actively in-
16 volved in activities relating to energy efficiency
17 and renewable energy industries; and

18 (C) the ability to help individuals achieve
19 economic self-sufficiency.

20 (b) ESTABLISHMENT.—The Secretary shall award
21 grants to eligible entities to pay the Federal share of asso-
22 ciated career skills training programs under which stu-
23 dents concurrently receive classroom instruction and on-
24 the-job training for the purpose of obtaining an industry-

1 related certification to install energy efficient buildings
2 technologies.

3 (c) FEDERAL SHARE.—The Federal share of the cost
4 of carrying out a career skills training program described
5 in subsection (b) shall be 50 percent.

6 (d) APPROPRIATIONS.—In addition to amounts other-
7 wise made available, there is appropriated to the Secretary
8 to carry out this section, out of any amounts in the Treas-
9 ury not otherwise appropriated, \$10,000,000 for fiscal
10 year 2022, to remain available until expended.

11 **SEC. 5104. COMMERCIAL BUILDING ENERGY CONSUMPTION**
12 **INFORMATION SHARING.**

13 (a) DEFINITIONS.—In this section:

14 (1) ADMINISTRATOR.—The term “Adminis-
15 trator” means the Administrator of the Energy In-
16 formation Administration.

17 (2) AGREEMENT.—The term “Agreement”
18 means the agreement entered into under subsection

19 (b).

20 (3) SURVEY.—The term “Survey” means the
21 Commercial Building Energy Consumption Survey.

22 (b) AUTHORIZATION OF AGREEMENT.—Not later
23 than 120 days after the date of enactment of this Act,
24 the Administrator and the Administrator of the Environ-
25 mental Protection Agency shall sign, and submit to Con-

1 gress, an information sharing agreement relating to com-
2 mercial building energy consumption data.

3 (c) CONTENT OF AGREEMENT.—The Agreement
4 shall—

5 (1) provide that—

6 (A) the Administrator shall have access to
7 building-specific data in the Portfolio Manager
8 database of the Environmental Protection
9 Agency; and

10 (B) the Administrator of the Environ-
11 mental Protection Agency shall have access to
12 unmasked, raw building-specific data collected
13 by the Survey;

14 (2) describe the manner in which the Adminis-
15 trator shall incorporate appropriate data (including
16 the data described in subsection (d)) into any Survey
17 published for the 2018 Survey cycle and each subse-
18 quent cycle for the purpose of analyzing and esti-
19 mating building population, size, location, activity,
20 energy usage, and any other relevant building char-
21 acteristic;

22 (3) describe and compare—

23 (A) the methodologies that the Energy In-
24 formation Administration, the Environmental
25 Protection Agency, and State and local govern-

1 ment managers use to maximize the quality, re-
2 liability, and integrity of data collected through
3 the Survey, the Portfolio Manager database of
4 the Environmental Protection Agency, and
5 State and local building energy disclosure laws
6 (including regulations), respectively, and the
7 manner in which those methodologies can be
8 improved; and

9 (B) consistencies and variations in data for
10 the same buildings captured in—

11 (i)(I) the 2018 Survey cycle; and

12 (II) each subsequent Survey cycle;

13 and

14 (ii) the Portfolio Manager database of
15 the Environmental Protection Agency;

16 (4) consider whether, and the methods by
17 which, the Administrator may collect and publish
18 new iterations of Survey data every 3 years—

19 (A) using the Survey processes of the Ad-
20 ministrator; or

21 (B) as supplemented by information in the
22 Portfolio Manager database of the Environ-
23 mental Protection Agency.

24 (d) DATA.—The data referred in subsection (c)(2) in-
25 cludes data that—

1 (1) is collected through the Portfolio Manager
2 database of the Environmental Protection Agency;

3 (2) is required to be publicly available on the
4 internet under State and local government building
5 energy disclosure laws (including regulations); and

6 (3) includes information on private sector build-
7 ings that are not less than 250,000 square feet.

8 (e) PROTECTION OF INFORMATION.—In carrying out
9 the agreement, the Administrator and the Administrator
10 of the Environmental Protection Agency shall protect in-
11 formation in accordance with—

12 (1) section 552(b)(4) of title 5, United States
13 Code (commonly known as the “Freedom of Infor-
14 mation Act”);

15 (2) subchapter III of chapter 35 of title 44,
16 United States Code; and

17 (3) any other applicable law (including regula-
18 tions).

19 **Subtitle C—Industrial Energy** 20 **Efficiency**

21 **PART I—INDUSTRY**

22 **SEC. 5201. FUTURE OF INDUSTRY PROGRAM AND INDUS-** 23 **TRIAL RESEARCH AND ASSESSMENT CEN-** 24 **TERS.**

25 (a) FUTURE OF INDUSTRY PROGRAM.—

1 (1) IN GENERAL.—Section 452 of the Energy
2 Independence and Security Act of 2007 (42 U.S.C.
3 17111) is amended—

4 (A) by striking the section heading and in-
5 serting the following: “**FUTURE OF INDUSTRY**
6 **PROGRAM**”;

7 (B) in subsection (a)(2)—

8 (i) by redesignating subparagraph (E)
9 as subparagraph (F); and

10 (ii) by inserting after subparagraph
11 (D) the following:

12 “(E) water and wastewater treatment fa-
13 cilities, including systems that treat municipal,
14 industrial, and agricultural waste; and”;

15 (C) by striking subsection (e); and

16 (D) by redesignating subsection (f) as sub-
17 section (e).

18 (2) CONFORMING AMENDMENT.—Section
19 454(b)(2)(C) of the Energy Independence and Secu-
20 rity Act of 2007 (42 U.S.C. 17113(b)(2)(C)) is
21 amended by striking “energy-intensive industries”
22 and inserting “Future of Industry”.

23 (b) INDUSTRIAL RESEARCH AND ASSESSMENT CEN-
24 TERS.—Subtitle D of title IV of the Energy Independence

1 and Security Act of 2007 (42 U.S.C. 17111 et seq.) is
2 amended by adding at the end the following:

3 **“SEC. 457. INDUSTRIAL RESEARCH AND ASSESSMENT CEN-**
4 **TERS.**

5 “(a) DEFINITIONS.—In this section:

6 “(1) COVERED PROJECT.—The term ‘covered
7 project’ means a project—

8 “(A) that has been recommended in an en-
9 ergy assessment described in paragraph (2)(A)
10 conducted for an eligible entity; and

11 “(B) with respect to which the plant site
12 of that eligible entity—

13 “(i) improves—

14 “(I) energy efficiency;

15 “(II) material efficiency;

16 “(III) cybersecurity; or

17 “(IV) productivity; or

18 “(ii) reduces—

19 “(I) waste production;

20 “(II) greenhouse gas emissions;

21 or

22 “(III) nongreenhouse gas pollu-
23 tion.

1 “(2) ELIGIBLE ENTITY.—The term ‘eligible en-
2 tity’ means a small- or medium-sized manufacturer
3 that has had an energy assessment completed by—

4 “(A) an industrial research and assessment
5 center; or

6 “(B) a third-party assessor that provides
7 an assessment equivalent to that of an indus-
8 trial research and assessment center, as deter-
9 mined by the Secretary.

10 “(3) ENERGY SERVICE PROVIDER.—The term
11 ‘energy service provider’ means—

12 “(A) any business providing technology or
13 services to improve the energy efficiency, water
14 efficiency, power factor, or load management of
15 a manufacturing site or other industrial process
16 in an energy-intensive industry (as defined in
17 section 452(a)); and

18 “(B) any utility operating under a utility
19 energy service project.

20 “(4) INDUSTRIAL RESEARCH AND ASSESSMENT
21 CENTER.—The term ‘industrial research and assess-
22 ment center’ means—

23 “(A) an institution of higher education-
24 based industrial research and assessment center

1 that is funded by the Secretary under sub-
2 section (b); and

3 “(B) an industrial research and assess-
4 ment center at a trade school, community col-
5 lege, or union training program that is funded
6 by the Secretary under subsection (f).

7 “(5) PROGRAM.—The term ‘Program’ means
8 the program for implementation grants established
9 under subsection (i)(1).

10 “(6) SMALL- OR MEDIUM-SIZED MANUFAC-
11 Turer.—The term ‘small- or medium-sized manu-
12 facturer’ means a manufacturing firm—

13 “(A) the gross annual sales of which are
14 less than \$100,000,000;

15 “(B) that has fewer than 500 employees at
16 the plant site of the manufacturing firm; and

17 “(C) the annual energy bills of which total
18 more than \$100,000 but less than \$2,500,000.

19 “(b) INSTITUTION OF HIGHER EDUCATION-BASED
20 INDUSTRIAL RESEARCH AND ASSESSMENT CENTERS.—

21 “(1) IN GENERAL.—The Secretary shall provide
22 funding to institution of higher education-based in-
23 dustrial research and assessment centers.

1 “(2) PURPOSE.—The purpose of each institu-
2 tion of higher education-based industrial research
3 and assessment center shall be—

4 “(A) to provide in-depth assessments of
5 small- and medium-sized manufacturer plant
6 sites to evaluate the facilities, services, and
7 manufacturing operations of the plant sites;

8 “(B) to identify opportunities for opti-
9 mizing energy efficiency and environmental per-
10 formance, including implementation of—

11 “(i) smart manufacturing;

12 “(ii) energy management systems;

13 “(iii) sustainable manufacturing;

14 “(iv) information technology advance-
15 ments for supply chain analysis, logistics,
16 system monitoring, industrial and manu-
17 facturing processes, and other purposes;
18 and

19 “(v) waste management systems;

20 “(C) to promote applications of emerging
21 concepts and technologies in small- and me-
22 dium-sized manufacturers (including water and
23 wastewater treatment facilities and federally
24 owned manufacturing facilities);

1 “(D) to promote research and development
2 for the use of alternative energy sources to sup-
3 ply heat, power, and new feedstocks for energy-
4 intensive industries;

5 “(E) to coordinate with appropriate Fed-
6 eral and State research offices;

7 “(F) to provide a clearinghouse for indus-
8 trial process and energy efficiency technical as-
9 sistance resources; and

10 “(G) to coordinate with State-accredited
11 technical training centers and community col-
12 leges, while ensuring appropriate services to all
13 regions of the United States.

14 “(c) COORDINATION.—To increase the value and ca-
15 pabilities of the industrial research and assessment cen-
16 ters, the centers shall—

17 “(1) coordinate with Manufacturing Extension
18 Partnership Centers of the National Institute of
19 Standards and Technology;

20 “(2) coordinate with the Federal Energy Man-
21 agement Program and the Building Technologies Of-
22 fice of the Department of Energy to provide building
23 assessment services to manufacturers;

24 “(3) increase partnerships with the National
25 Laboratories of the Department of Energy to lever-

1 age the expertise, technologies, and research and de-
2 velopment capabilities of the National Laboratories
3 for national industrial and manufacturing needs;

4 “(4) increase partnerships with energy service
5 providers and technology providers to leverage pri-
6 vate sector expertise and accelerate deployment of
7 new and existing technologies and processes for en-
8 ergy efficiency, power factor, and load management;

9 “(5) identify opportunities for reducing green-
10 house gas emissions and other air emissions; and

11 “(6) promote sustainable manufacturing prac-
12 tices for small- and medium-sized manufacturers.

13 “(d) OUTREACH.—The Secretary shall provide fund-
14 ing for—

15 “(1) outreach activities by the industrial re-
16 search and assessment centers to inform small- and
17 medium-sized manufacturers of the information,
18 technologies, and services available; and

19 “(2) coordination activities by each industrial
20 research and assessment center to leverage efforts
21 with—

22 “(A) Federal, State, and Tribal efforts;

23 “(B) the efforts of utilities and energy
24 service providers;

1 “(C) the efforts of regional energy effi-
2 ciency organizations; and

3 “(D) the efforts of other industrial re-
4 search and assessment centers.

5 “(e) CENTERS OF EXCELLENCE.—

6 “(1) ESTABLISHMENT.—The Secretary shall es-
7 tablish a Center of Excellence at not more than 5
8 of the highest-performing industrial research and as-
9 sessment centers, as determined by the Secretary.

10 “(2) DUTIES.—A Center of Excellence shall co-
11 ordinate with and advise the industrial research and
12 assessment centers located in the region of the Cen-
13 ter of Excellence, including—

14 “(A) by mentoring new directors and staff
15 of the industrial research and assessment cen-
16 ters with respect to—

17 “(i) the availability of resources; and

18 “(ii) best practices for carrying out
19 assessments, including through the partici-
20 pation of the staff of the Center of Excel-
21 lence in assessments carried out by new in-
22 dustrial research and assessment centers;

23 “(B) by providing training to staff and
24 students at the industrial research and assess-
25 ment centers on new technologies, practices,

1 and tools to expand the scope and impact of the
2 assessments carried out by the centers;

3 “(C) by assisting the industrial research
4 and assessment centers with specialized tech-
5 nical opportunities, including by providing a
6 clearinghouse of available expertise and tools to
7 assist the centers and clients of the centers in
8 assessing and implementing those opportunities;

9 “(D) by identifying and coordinating with
10 regional, State, local, Tribal, and utility energy
11 efficiency programs for the purpose of facili-
12 tating efforts by industrial research and assess-
13 ment centers to connect industrial facilities re-
14 ceiving assessments from those centers with re-
15 gional, State, local, and utility energy efficiency
16 programs that could aid the industrial facilities
17 in implementing any recommendations resulting
18 from the assessments;

19 “(E) by facilitating coordination between
20 the industrial research and assessment centers
21 and other Federal programs described in para-
22 graphs (1) through (3) of subsection (c); and

23 “(F) by coordinating the outreach activi-
24 ties of the industrial research and assessment
25 centers under subsection (d)(1).

1 “(3) FUNDING.—For each fiscal year, out of
2 any amounts made available to carry out this section
3 under subsection (j), the Secretary shall use not less
4 than \$500,000 to support each Center of Excellence.

5 “(f) EXPANSION OF INDUSTRIAL RESEARCH AND AS-
6 SESSMENT CENTERS.—

7 “(1) IN GENERAL.—The Secretary shall provide
8 funding to establish additional industrial research
9 and assessment centers at trade schools, community
10 colleges, and union training programs.

11 “(2) PURPOSE.—

12 “(A) IN GENERAL.—Subject to subpara-
13 graph (B), to the maximum extent practicable,
14 an industrial research and assessment center
15 established under paragraph (1) shall have the
16 same purpose as an institution of higher edu-
17 cation-based industrial research center that is
18 funded by the Secretary under subsection
19 (b)(1).

20 “(B) CONSIDERATION OF CAPABILITIES.—

21 In evaluating or establishing the purpose of an
22 industrial research and assessment center es-
23 tablished under paragraph (1), the Secretary
24 shall take into consideration the varying capa-

1 bilities of trade schools, community colleges,
2 and union training programs.

3 “(g) WORKFORCE TRAINING.—

4 “(1) INTERNSHIPS.—The Secretary shall pay
5 the Federal share of associated internship programs
6 under which students work with or for industries,
7 manufacturers, and energy service providers to im-
8 plement the recommendations of industrial research
9 and assessment centers.

10 “(2) APPRENTICESHIPS.—The Secretary shall
11 pay the Federal share of associated apprenticeship
12 programs under which—

13 “(A) students work with or for industries,
14 manufacturers, and energy service providers to
15 implement the recommendations of industrial
16 research and assessment centers; and

17 “(B) employees of facilities that have re-
18 ceived an assessment from an industrial re-
19 search and assessment center work with or for
20 an industrial research and assessment center to
21 gain knowledge on engineering practices and
22 processes to improve productivity and energy
23 savings.

24 “(3) FEDERAL SHARE.—The Federal share of
25 the cost of carrying out internship programs de-

1 scribed in paragraph (1) and apprenticeship pro-
2 grams described in paragraph (2) shall be 50 per-
3 cent.

4 “(h) SMALL BUSINESS LOANS.—The Administrator
5 of the Small Business Administration shall, to the max-
6 imum extent practicable, expedite consideration of applica-
7 tions from eligible small business concerns for loans under
8 the Small Business Act (15 U.S.C. 631 et seq.) to imple-
9 ment recommendations developed by the industrial re-
10 search and assessment centers.

11 “(i) IMPLEMENTATION GRANTS.—

12 “(1) IN GENERAL.—The Secretary shall estab-
13 lish a program under which the Secretary shall pro-
14 vide grants to eligible entities to implement covered
15 projects.

16 “(2) APPLICATION.—An eligible entity seeking
17 a grant under the Program shall submit to the Sec-
18 retary an application at such time, in such manner,
19 and containing such information as the Secretary
20 may require, including a demonstration of need for
21 financial assistance to implement the proposed cov-
22 ered project.

23 “(3) PRIORITY.—In awarding grants under the
24 Program, the Secretary shall give priority to eligible
25 entities that—

1 “(A) have had an energy assessment com-
2 pleted by an industrial research and assessment
3 center; and

4 “(B) propose to carry out a covered project
5 with a greater potential for—

6 “(i) energy efficiency gains; or

7 “(ii) greenhouse gas emissions reduc-
8 tions.

9 “(4) GRANT AMOUNT.—

10 “(A) MAXIMUM AMOUNT.—The amount of
11 a grant provided to an eligible entity under the
12 Program shall not exceed \$300,000.

13 “(B) FEDERAL SHARE.—A grant awarded
14 under the Program for a covered project shall
15 be in an amount that is not more than 50 per-
16 cent of the cost of the covered project.

17 “(C) SUPPLEMENT.—A grant received by
18 an eligible entity under the Program shall sup-
19 plement, not supplant, any private or State
20 funds available to the eligible entity to carry
21 out the covered project.

22 “(j) APPROPRIATIONS.—In addition to amounts oth-
23 erwise made available, there is appropriated to the Sec-
24 retary, out of any amounts in the Treasury not otherwise

1 appropriated, for each of fiscal years 2022 through
2 2026—

3 “(1) \$30,000,000 to carry out subsections (a)
4 through (h); and

5 “(2) \$80,000,000 to carry out subsection (i).”.

6 (c) CLERICAL AMENDMENT.—The table of contents
7 of the Energy Independence and Security Act of 2007 (42
8 U.S.C. prec. 17001) is amended by adding at the end of
9 the items relating to subtitle D of title IV the following:

“Sec. 457. Industrial research and assessment centers.”.

10 **SEC. 5202. SUSTAINABLE MANUFACTURING INITIATIVE.**

11 (a) IN GENERAL.—Part E of title III of the Energy
12 Policy and Conservation Act (42 U.S.C. 6341 et seq.) is
13 amended by adding at the end the following:

14 **“SEC. 376. SUSTAINABLE MANUFACTURING INITIATIVE.**

15 “(a) IN GENERAL.—As part of the Office of Energy
16 Efficiency and Renewable Energy of the Department of
17 Energy, the Secretary, on the request of a manufacturer,
18 shall carry out onsite technical assessments to identify op-
19 portunities for—

20 “(1) maximizing the energy efficiency of indus-
21 trial processes and cross-cutting systems;

22 “(2) preventing pollution and minimizing waste;

23 “(3) improving efficient use of water in manu-
24 facturing processes;

25 “(4) conserving natural resources; and

1 “(5) achieving such other goals as the Secretary
2 determines to be appropriate.

3 “(b) COORDINATION.—To implement any rec-
4 ommendations resulting from an onsite technical assess-
5 ment carried out under subsection (a) and to accelerate
6 the adoption of new and existing technologies and proc-
7 esses that improve energy efficiency, the Secretary shall
8 coordinate with—

9 “(1) the Advanced Manufacturing Office of the
10 Department of Energy;

11 “(2) the Building Technologies Office of the
12 Department of Energy;

13 “(3) the Federal Energy Management Program
14 of the Department of Energy; and

15 “(4) the private sector and other appropriate
16 agencies, including the National Institute of Stand-
17 ards and Technology.

18 “(c) RESEARCH AND DEVELOPMENT PROGRAM FOR
19 SUSTAINABLE MANUFACTURING AND INDUSTRIAL TECH-
20 NOLOGIES AND PROCESSES.—As part of the industrial ef-
21 ficiency programs of the Department of Energy, the Sec-
22 retary shall carry out a joint industry-government partner-
23 ship program to research, develop, and demonstrate new
24 sustainable manufacturing and industrial technologies and

1 processes that maximize the energy efficiency of industrial
2 plants, reduce pollution, and conserve natural resources.”.

3 (b) CLERICAL AMENDMENT.—The table of contents
4 of the Energy Policy and Conservation Act (42 U.S.C.
5 prec. 6201) is amended by adding at the end of the items
6 relating to part E of title III the following:

“Sec. 376. Sustainable manufacturing initiative.”.

7 **PART II—SMART MANUFACTURING**

8 **SEC. 5211. DEFINITIONS.**

9 In this part:

10 (1) ENERGY MANAGEMENT SYSTEM.—The term
11 “energy management system” means a business
12 management process based on standards of the
13 American National Standards Institute that enables
14 an organization to follow a systematic approach in
15 achieving continual improvement of energy perform-
16 ance, including energy efficiency, security, use, and
17 consumption.

18 (2) INDUSTRIAL ASSESSMENT CENTER.—The
19 term “industrial assessment center” means a center
20 located at an institution of higher education that—

21 (A) receives funding from the Department;

22 (B) provides an in-depth assessment of
23 small- and medium-size manufacturer plant
24 sites to evaluate the facilities, services, and
25 manufacturing operations of the plant site; and

1 (C) identifies opportunities for potential
2 savings for small- and medium-size manufac-
3 turer plant sites from energy efficiency improve-
4 ments, waste minimization, pollution preven-
5 tion, and productivity improvement.

6 (3) INFORMATION AND COMMUNICATION TECH-
7 NOLOGY.—The term “information and communica-
8 tion technology” means any electronic system or
9 equipment (including the content contained in the
10 system or equipment) used to create, convert, com-
11 municate, or duplicate data or information, including
12 computer hardware, firmware, software, communica-
13 tion protocols, networks, and data interfaces.

14 (4) INSTITUTION OF HIGHER EDUCATION.—The
15 term “institution of higher education” has the
16 meaning given the term in section 101(a) of the
17 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

18 (5) NORTH AMERICAN INDUSTRY CLASSIFICA-
19 TION SYSTEM.—The term “North American Indus-
20 try Classification System” means the standard used
21 by Federal statistical agencies in classifying business
22 establishments for the purpose of collecting, ana-
23 lyzing, and publishing statistical data relating to the
24 business economy of the United States.

1 (6) SMALL AND MEDIUM MANUFACTURERS.—

2 The term “small and medium manufacturers”
3 means manufacturing firms—

4 (A) classified in the North American In-
5 dustry Classification System as any of sectors
6 31 through 33;

7 (B) with gross annual sales of less than
8 \$100,000,000;

9 (C) with fewer than 500 employees at the
10 plant site; and

11 (D) with annual energy bills totaling more
12 than \$100,000 and less than \$2,500,000.

13 (7) SMART MANUFACTURING.—The term
14 “smart manufacturing” means advanced tech-
15 nologies in information, automation, monitoring,
16 computation, sensing, modeling, artificial intel-
17 ligence, analytics, and networking that—

18 (A) digitally—

19 (i) simulate manufacturing production
20 lines;

21 (ii) operate computer-controlled man-
22 ufacturing equipment;

23 (iii) monitor and communicate pro-
24 duction line status; and

1 (iv) manage and optimize energy pro-
2 ductivity and cost throughout production;

3 (B) model, simulate, and optimize the en-
4 ergy efficiency of a factory building;

5 (C) monitor and optimize building energy
6 performance;

7 (D) model, simulate, and optimize the de-
8 sign of energy efficient and sustainable prod-
9 ucts, including the use of digital prototyping
10 and additive manufacturing to enhance product
11 design;

12 (E) connect manufactured products in net-
13 works to monitor and optimize the performance
14 of the networks, including automated network
15 operations; and

16 (F) digitally connect the supply chain net-
17 work.

18 **SEC. 5212. LEVERAGING EXISTING AGENCY PROGRAMS TO**
19 **ASSIST SMALL AND MEDIUM MANUFACTUR-**
20 **ERS.**

21 (a) **EXPANSION OF TECHNICAL ASSISTANCE PRO-**
22 **GRAMS.**—The Secretary shall expand the scope of tech-
23 nologies covered by the industrial assessment centers of
24 the Department—

1 (1) to include smart manufacturing technologies
2 and practices; and

3 (2) to equip the directors of the industrial as-
4 sessment centers with the training and tools nec-
5 essary to provide technical assistance in smart man-
6 ufacturing technologies and practices, including en-
7 ergy management systems, to manufacturers.

8 (b) FUNDING.—The Secretary shall use unobligated
9 funds of the Department to carry out this section.

10 **SEC. 5213. LEVERAGING SMART MANUFACTURING INFRA-**
11 **STRUCTURE AT NATIONAL LABORATORIES.**

12 (a) STUDY.—

13 (1) IN GENERAL.—Not later than 180 days
14 after the date of enactment of this Act, the Sec-
15 retary shall conduct a study on how the Department
16 can increase access to existing high-performance
17 computing resources in the National Laboratories,
18 particularly for small and medium manufacturers.

19 (2) INCLUSIONS.—In identifying ways to in-
20 crease access to National Laboratories under para-
21 graph (1), the Secretary shall—

22 (A) focus on increasing access to the com-
23 puting facilities of the National Laboratories;
24 and

25 (B) ensure that—

1 (i) the information from the manufac-
2 turer is protected; and

3 (ii) the security of the National Lab-
4 oratory facility is maintained.

5 (3) REPORT.—Not later than 1 year after the
6 date of enactment of this Act, the Secretary shall
7 submit to Congress a report describing the results of
8 the study.

9 (b) ACTIONS FOR INCREASED ACCESS.—The Sec-
10 retary shall facilitate access to the National Laboratories
11 studied under subsection (a) for small and medium manu-
12 facturers so that small and medium manufacturers can
13 fully use the high-performance computing resources of the
14 National Laboratories to enhance the manufacturing com-
15 petitiveness of the United States.

16 **SEC. 5214. STATE MANUFACTURING LEADERSHIP.**

17 (a) FINANCIAL ASSISTANCE AUTHORIZED.—The
18 Secretary may provide financial assistance on a competi-
19 tive basis to States for the establishment of programs to
20 be used as models for supporting the implementation of
21 smart manufacturing technologies.

22 (b) APPLICATIONS.—

23 (1) IN GENERAL.—To be eligible to receive fi-
24 nancial assistance under this section, a State shall
25 submit to the Secretary an application at such time,

1 in such manner, and containing such information as
2 the Secretary may require.

3 (2) CRITERIA.—The Secretary shall evaluate an
4 application for financial assistance under this section
5 on the basis of merit using criteria identified by the
6 Secretary, including—

7 (A) technical merit, innovation, and im-
8 pact;

9 (B) research approach, workplan, and
10 deliverables;

11 (C) academic and private sector partners;
12 and

13 (D) alternate sources of funding.

14 (c) REQUIREMENTS.—

15 (1) TERM.—The term of an award of financial
16 assistance under this section shall not exceed 3
17 years.

18 (2) MAXIMUM AMOUNT.—The amount of an
19 award of financial assistance under this section shall
20 be not more than \$2,000,000.

21 (3) MATCHING REQUIREMENT.—Each State
22 that receives financial assistance under this section
23 shall contribute matching funds in an amount equal
24 to not less than 30 percent of the amount of the fi-
25 nancial assistance.

1 (d) USE OF FUNDS.—

2 (1) IN GENERAL.—A State may use financial
3 assistance provided under this section—

4 (A) to facilitate access to high-performance
5 computing resources for small and medium
6 manufacturers; and

7 (B) to provide assistance to small and me-
8 dium manufacturers to implement smart manu-
9 facturing technologies and practices.

10 (e) EVALUATION.—The Secretary shall conduct semi-
11 annual evaluations of each award of financial assistance
12 under this section—

13 (1) to determine the impact and effectiveness of
14 programs funded with the financial assistance; and

15 (2) to provide guidance to States on ways to
16 better execute the program of the State.

17 (f) AUTHORIZATION.—There is authorized to be ap-
18 propriated to the Secretary to carry out this section
19 \$10,000,000 for each of fiscal years **【2022 through**
20 **2026】**.

21 **SEC. 5215. REPORT.**

22 The Secretary annually shall submit to Congress and
23 make publicly available a report on the progress made in
24 advancing smart manufacturing in the United States.

1 **Subtitle D—Schools and Nonprofits**

2 **SEC. 5301. GRANTS FOR ENERGY EFFICIENCY IMPROVE-** 3 **MENTS AND RENEWABLE ENERGY IMPROVE-** 4 **MENTS AT PUBLIC SCHOOL FACILITIES.**

5 (a) DEFINITIONS.—In this section:

6 (1) ELIGIBLE ENTITY.—The term “eligible enti-
7 ty” means a consortium of—

8 (A) 1 local educational agency; and

9 (B) 1 or more—

10 (i) schools;

11 (ii) nonprofit organizations;

12 (iii) for-profit organizations; or

13 (iv) community partners that have the
14 knowledge and capacity to partner and as-
15 sist with energy improvements.

16 (2) ENERGY IMPROVEMENT.—The term “en-
17 ergy improvement” means—

18 (A) any improvement, repair, or renovation
19 to a school that results in a direct reduction in
20 school energy costs, including improvements to
21 the envelope, air conditioning system, ventila-
22 tion system, heating system, domestic hot water
23 heating system, compressed air system, dis-
24 tribution system, lighting system, power system,
25 and controls of a building;

1 (B) any improvement, repair, or renovation
2 to, or installation in, a school that leads to an
3 improvement in teacher and student health, in-
4 cluding indoor air quality, daylighting, ventila-
5 tion, electrical lighting, windows, roofing (in-
6 cluding green roofs), outdoor gardens, and
7 acoustics;

8 (C) any improvement, repair, or renovation
9 to a school involving the installation of renew-
10 able energy technologies (such as wind power,
11 photovoltaics, solar thermal systems, geo-
12 thermal energy, hydrogen-fueled systems, bio-
13 mass-based systems, biofuels, anaerobic digest-
14 ers, and hydropower);

15 (D) the installation of zero-emissions vehi-
16 cle infrastructure on school grounds for—

17 (i) exclusive use of school buses,
18 school fleets, or students; or

19 (ii) the general public; and

20 (E) the purchase or lease of zero-emissions
21 vehicles to be used by a school, including school
22 buses, fleet vehicles, and other operational vehi-
23 cles.

24 (3) HIGH SCHOOL.—The term “high school”
25 has the meaning given the term in section 8101 of

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

3 (4) LOCAL EDUCATIONAL AGENCY.—The term
4 “local educational agency” has the meaning given
5 the term in section 8101 of the Elementary and Sec-
6 ondary Education Act of 1965 (20 U.S.C. 7801).

7 (5) PARTNERING LOCAL EDUCATIONAL AGEN-
8 CY.—The term “partnering local educational agen-
9 cy”, with respect to an eligible entity, means the
10 local educational agency participating in the consor-
11 tium of the eligible entity.

12 (6) ZERO-EMISSIONS VEHICLE INFRASTRUC-
13 TURE.—The term “zero-emissions vehicle infrastruc-
14 ture” means infrastructure used to charge or fuel—

15 (A) a zero-emission vehicle (as defined in
16 section 88.102–94 of title 40, Code of Federal
17 Regulations (or successor regulation)); or

18 (B) a vehicle that produces zero exhaust
19 emissions of any criteria pollutant (or precursor
20 pollutant) or greenhouse gas under any possible
21 operational mode or condition.

22 (b) GRANTS.—The Secretary shall award competitive
23 grants to eligible entities to make energy improvements
24 in accordance with this section.

25 (c) APPLICATIONS.—

1 (1) IN GENERAL.—An eligible entity desiring a
2 grant under this section shall submit to the Sec-
3 retary an application at such time, in such manner,
4 and containing such information as the Secretary
5 may require.

6 (2) CONTENTS.—The application submitted
7 under paragraph (1) shall include each of the fol-
8 lowing:

9 (A) A needs assessment of the current con-
10 dition of the school and school facilities that
11 will receive the energy improvements.

12 (B) A draft work plan of the intended
13 achievements of the eligible entity at the school.

14 (C) A description of the energy improve-
15 ments that the eligible entity will carry out at
16 the school.

17 (D) A description of the capacity of the eli-
18 gible entity to provide services and comprehen-
19 sive support to make the energy improvements
20 referred to in subparagraph (C).

21 (E) An assessment of the expected needs
22 of the eligible entity for operation and mainte-
23 nance training funds, and a plan for use of
24 those funds, if applicable.

1 (F) An assessment of the expected energy
2 efficiency and safety benefits of the energy im-
3 provements.

4 (G) A cost estimate of the proposed energy
5 improvements.

6 (H) An identification of other resources
7 that are available to carry out the activities for
8 which grant funds are requested under this sec-
9 tion, including the availability of utility pro-
10 grams and public benefit funds.

11 (d) PRIORITY.—

12 (1) IN GENERAL.—In awarding grants under
13 this section, the Secretary shall give priority to an
14 eligible entity—

15 (A) that has renovation, repair, and im-
16 provement funding needs; and

17 (B)(i) that, as determined by the Sec-
18 retary, serves a high percentage of students, in-
19 cluding students in a high school in accordance
20 with paragraph (2), who are eligible for a free
21 or reduced price lunch under the Richard B.
22 Russell National School Lunch Act (42 U.S.C.
23 1751 et seq.); or

24 (ii) the partnering local educational agency
25 of which is designated with a school district lo-

1 cale code of 41, 42, or 43, as determined by the
2 National Center for Education Statistics in con-
3 sultation with the Bureau of the Census.

4 (2) HIGH SCHOOL STUDENTS.—In the case of
5 students in a high school, the percentage of students
6 eligible for a free or reduced price lunch described
7 in paragraph (1)(B)(i) shall be calculated using data
8 from the schools that feed into the high school.

9 (e) COMPETITIVE CRITERIA.—The competitive cri-
10 teria used by the Secretary to award grants under this
11 section shall include the following:

12 (1) The extent of the disparity between the fis-
13 cal capacity of the eligible entity to carry out energy
14 improvements at school facilities and the needs of
15 the partnering local educational agency for those en-
16 ergy improvements, including consideration of—

17 (A) the current and historic ability of the
18 partnering local educational agency to raise
19 funds for construction, renovation, moderniza-
20 tion, and major repair projects for schools;

21 (B) the ability of the partnering local edu-
22 cational agency to issue bonds or receive other
23 funds to support the current infrastructure
24 needs of the partnering local educational agency
25 for schools; and

1 (C) the bond rating of the partnering local
2 educational agency.

3 (2) The likelihood that the partnering local edu-
4 cational agency or eligible entity will maintain, in
5 good condition, any school and school facility that is
6 the subject of improvements.

7 (3) The potential energy efficiency and safety
8 benefits from the proposed energy improvements.

9 (f) USE OF GRANT AMOUNTS.—

10 (1) IN GENERAL.—Except as provided in this
11 subsection, an eligible entity receiving a grant under
12 this section shall use the grant amounts only to
13 make the energy improvements described in the ap-
14 plication submitted by the eligible entity under sub-
15 section (c).

16 (2) OPERATION AND MAINTENANCE TRAIN-
17 ING.—An eligible entity receiving a grant under this
18 section may use not more than 5 percent of the
19 grant amounts for operation and maintenance train-
20 ing for energy efficiency and renewable energy im-
21 provements, such as maintenance staff and teacher
22 training, education, and preventative maintenance
23 training.

24 (3) THIRD-PARTY INVESTIGATION AND ANAL-
25 YSIS.—An eligible entity receiving a grant under this

1 section may use a portion of the grant amounts for
2 a third-party investigation and analysis of the en-
3 ergy improvements carried out by the eligible entity,
4 such as energy audits and existing building commis-
5 sioning.

6 (4) CONTINUING EDUCATION.—An eligible enti-
7 ty receiving a grant under this section may use not
8 more than 3 percent of the grant amounts to develop
9 a continuing education curriculum relating to energy
10 improvements.

11 (g) COMPETITION IN CONTRACTING.—If an eligible
12 entity receiving a grant under this section uses grant
13 funds to carry out repair or renovation through a contract,
14 the eligible entity shall be required to ensure that the con-
15 tract process—

16 (1) through full and open competition, ensures
17 the maximum practicable number of qualified bid-
18 ders, including small, minority, and women-owned
19 businesses; and

20 (2) gives priority to businesses located in, or re-
21 sources common to, the State or geographical area
22 in which the repair or renovation under the contract
23 will be carried out.

1 (h) BEST PRACTICES.—The Secretary shall develop
2 and publish guidelines and best practices for activities car-
3 ried out under this section.

4 (i) REPORT BY ELIGIBLE ENTITY.—An eligible entity
5 receiving a grant under this section shall submit to the
6 Secretary, at such time as the Secretary may require, a
7 report describing—

8 (1) the use of the grant funds for energy im-
9 provements;

10 (2) the estimated cost savings realized by those
11 energy improvements;

12 (3) the results of any third-party investigation
13 and analysis conducted relating to those energy im-
14 provements;

15 (4) the use of any utility programs and public
16 benefit funds; and

17 (5) the use of performance tracking for energy
18 improvements, such as—

19 (A) the Energy Star program established
20 under section 324A of the Energy Policy and
21 Conservation Act (42 U.S.C. 6294a); or

22 (B) the United States Green Building
23 Council Leadership in Energy and Environ-
24 mental Design (LEED) green building rating
25 system for existing buildings.

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

6 **SEC. 5302. ENERGY EFFICIENCY MATERIALS PILOT PRO-**
7 **GRAM.**

8 (a) DEFINITIONS.—In this section:

9 (1) APPLICANT.—The term “applicant” means
10 a nonprofit organization that applies for a grant
11 under this section.

12 (2) ENERGY-EFFICIENCY MATERIAL.—

13 (A) IN GENERAL.—The term “energy-effi-
14 ciency material” means a material (including a
15 product, equipment, or system) the installation
16 of which results in a reduction in use by a non-
17 profit organization of energy or fuel.

18 (B) INCLUSIONS.—The term “energy-effi-
19 ciency material” includes—

20 (i) a roof or lighting system or compo-
21 nent of the system;

22 (ii) a window;

23 (iii) a door, including a security door;

24 (iv) a heating, ventilation, or air con-
25 ditioning system or component of the sys-

1 tem (including insulation and wiring and
2 plumbing improvements needed to serve a
3 more efficient system); and

4 (v) a renewable energy generation or
5 heating system, including a solar, photo-
6 voltaic, wind, geothermal, or biomass (in-
7 cluding wood pellet) system or component
8 of the system.

9 (3) NONPROFIT BUILDING.—

10 (A) IN GENERAL.—The term “nonprofit
11 building” means a building operated and owned
12 by an organization that is described in section
13 501(c)(3) of the Internal Revenue Code of 1986
14 and exempt from tax under section 501(a) of
15 such Code.

16 (B) INCLUSIONS.—The term “nonprofit
17 building” includes a building described in sub-
18 paragraph (A) that is—

19 (i) a hospital;

20 (ii) a youth center;

21 (iii) a school;

22 (iv) a social-welfare program facility;

23 (v) a faith-based organization; or

24 (vi) any other nonresidential and non-
25 commercial structure.

1 (b) ESTABLISHMENT.—Not later than 1 year after
2 the date of enactment of this Act, the Secretary shall es-
3 tablish a pilot program to award grants for the purpose
4 of providing nonprofit buildings with energy-efficiency ma-
5 terials.

6 (c) GRANTS.—

7 (1) IN GENERAL.—The Secretary may award
8 grants under the program established under sub-
9 section (b).

10 (2) APPLICATION.—The Secretary may award a
11 grant under paragraph (1) if an applicant submits
12 to the Secretary an application at such time, in such
13 form, and containing such information as the Sec-
14 retary may prescribe.

15 (3) CRITERIA FOR GRANT.—In determining
16 whether to award a grant under paragraph (1), the
17 Secretary shall apply performance-based criteria,
18 which shall give priority to applicants based on—

19 (A) the energy savings achieved;

20 (B) the cost effectiveness of the use of en-
21 ergy-efficiency materials;

22 (C) an effective plan for evaluation, meas-
23 urement, and verification of energy savings; and

24 (D) the financial need of the applicant.

1 (4) LIMITATION ON INDIVIDUAL GRANT
2 AMOUNT.—Each grant awarded under this section
3 shall not exceed \$200,000.

4 (d) APPROPRIATIONS.—In addition to amounts other-
5 wise made available, there is appropriated to the Secretary
6 to carry out this section, out of any amounts in the Treas-
7 ury not otherwise appropriated, \$10,000,000 for each of
8 fiscal years 2022 through 2026, to remain available until
9 expended.

10 **Subtitle E—Miscellaneous**

11 **SEC. 5401. WEATHERIZATION ASSISTANCE PROGRAM.**

12 In addition to amounts otherwise available, there is
13 appropriated to the Secretary, out of any amounts in the
14 Treasury not otherwise appropriated, for the weatheriza-
15 tion assistance program established under part A of title
16 IV of the Energy Conservation and Production Act (42
17 U.S.C. 6861 et seq.) \$3,500,000,000 for fiscal year 2022,
18 to remain available until expended.

19 **SEC. 5402. ENERGY EFFICIENCY AND CONSERVATION** 20 **BLOCK GRANT PROGRAM.**

21 In addition to amounts otherwise available, there is
22 appropriated to the Secretary, out of any amounts in the
23 Treasury not otherwise appropriated, for the Energy Effi-
24 ciency and Conservation Block Grant Program established
25 under section 542(a) of the Energy Independence and Se-

1 curity Act of 2007 (42 U.S.C. 17152(a)) \$550,000,000
2 for fiscal year 2022, to remain available until expended.

3 **SEC. 5403. SURVEY, ANALYSIS, AND REPORT ON EMPLOY-**
4 **MENT AND DEMOGRAPHICS IN THE ENERGY,**
5 **ENERGY EFFICIENCY, AND MOTOR VEHICLE**
6 **SECTORS OF THE UNITED STATES.**

7 (a) ENERGY JOBS COUNCIL.—

8 (1) ESTABLISHMENT.—The Secretary shall es-
9 tablish a council, to be known as the “Energy Jobs
10 Council” (referred to in this section as the “Coun-
11 cil”).

12 (2) MEMBERSHIP.—The Council shall be com-
13 prised of—

14 (A) to be appointed by the Secretary—

15 (i) 1 or more representatives of the
16 Energy Information Administration; and

17 (ii) 1 or more representatives of a
18 State energy office that are serving as
19 members of the State Energy Advisory
20 Board established by section 365(g) of the
21 Energy Policy and Conservation Act (42
22 U.S.C. 6325(g));

23 (B) to be appointed by the Secretary of
24 Commerce—

1 (i) 1 or more representatives of the
2 Department of Commerce; and

3 (ii) 1 or more representatives of the
4 Bureau of the Census;

5 (C) 1 or more representatives of the Bu-
6 reau of Labor Statistics, to be appointed by the
7 Secretary of Labor; and

8 (D) 1 or more representatives of any other
9 Federal agency the assistance of which is re-
10 quired to carry out this section, as determined
11 by the Secretary, to be appointed by the head
12 of the applicable agency.

13 (b) SURVEY AND ANALYSIS.—

14 (1) IN GENERAL.—The Council shall—

15 (A) conduct a survey of employers in the
16 energy, energy efficiency, and motor vehicle sec-
17 tors of the economy of the United States; and

18 (B) perform an analysis of the employment
19 figures and demographics in those sectors, in-
20 cluding the number of personnel in each sector
21 who devote a substantial portion of working
22 hours, as determined by the Secretary, to com-
23 pliance matters.

1 (2) METHODOLOGY.—In conducting the survey
2 and analysis under paragraph (1), the Council shall
3 employ a methodology that—

4 (A) was approved in 2016 by the Office of
5 Management and Budget for use in the docu-
6 ment entitled “OMB Control Number 1910–
7 5179”;

8 (B) uses a representative, stratified sam-
9 pling of businesses in the United States; and

10 (C) is designed to elicit a comparable num-
11 ber of responses from businesses in each State
12 and with the same North American Industry
13 Classification System codes as were received for
14 the 2016 and 2017 reports entitled “U.S. En-
15 ergy and Employment Report”.

16 (3) CONSULTATION.—In conducting the survey
17 and analysis under paragraph (1), the Council shall
18 consult with key stakeholders, including—

19 (A) as the Council determines to be appro-
20 priate, the heads of relevant Federal agencies
21 and offices, including—

22 (i) the Secretary of Commerce;

23 (ii) the Secretary of Transportation;

24 (iii) the Director of the Bureau of the
25 Census;

1 (iv) the Commissioner of the Bureau
2 of Labor Statistics; and

3 (v) the Administrator of the Environ-
4 mental Protection Agency;

5 (B) States;

6 (C) the State Energy Advisory Board es-
7 tablished by section 365(g) of the Energy Pol-
8 icy and Conservation Act (42 U.S.C. 6325(g));
9 and

10 (D) energy industry trade associations.

11 (c) REPORT.—

12 (1) IN GENERAL.—Not later than 1 year after
13 the date of enactment of this Act, and annually
14 thereafter, the Secretary shall—

15 (A) make publicly available on the website
16 of the Department a report, to be entitled the
17 “U.S. Energy and Employment Report”, de-
18 scribing the employment figures and demo-
19 graphics in the energy, energy efficiency, and
20 motor vehicle sectors of the United States based
21 on the survey and analysis conducted under
22 subsection (b); and

23 (B) subject to the requirements of sub-
24 chapter III of chapter 35 of title 44, United
25 States Code, make the data collected by the

1 Council publicly available on the website of the
2 Department.

3 (2) CONTENTS.—

4 (A) IN GENERAL.—The report under para-
5 graph (1) shall include employment figures and
6 demographic data for—

7 (i) the energy sector of the economy
8 of the United States, including—

9 (I) the electric power generation
10 and fuels sector; and

11 (II) the transmission, storage,
12 and distribution sector;

13 (ii) the energy efficiency sector of the
14 economy of the United States; and

15 (iii) the motor vehicle sector of the
16 economy of the United States.

17 (B) INCLUSION.—With respect to each sec-
18 tor described in subparagraph (A), the report
19 under paragraph (1) shall include employment
20 figures and demographic data sorted by—

21 (i) each technology, subtechnology,
22 and fuel type of those sectors; and

23 (ii) subject to the requirements of the
24 Confidential Information Protection and

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1 Statistical Efficiency Act of 2002 (44
2 U.S.C. 3501 note; Public Law 107–347)—
3 (I) each State;
4 (II) each territory of the United
5 States;
6 (III) the District of Columbia;
7 and
8 (IV) each county (or equivalent
9 jurisdiction) in the United States.

10 **SEC. 5404. ASSISTING FEDERAL FACILITIES WITH ENERGY**
11 **CONSERVATION TECHNOLOGIES GRANT PRO-**
12 **GRAM.**

13 In addition to amounts otherwise made available,
14 there is appropriated to the Secretary, out of any amounts
15 in the Treasury not otherwise appropriated, to provide
16 grants authorized under section 546(b) of the National
17 Energy Conservation Policy Act (42 U.S.C. 8256(b)),
18 \$250,000,000 for fiscal year 2022, to remain available
19 until expended.

20 **SEC. 5405. REBATES.**

21 In addition to amounts otherwise made available,
22 there is appropriated to the Secretary, out of any amounts
23 in the Treasury not otherwise appropriated, for each of
24 fiscal years 2022 and 2023—

1 (1) \$5,000,000 for the extended product system
2 rebate program authorized under section 1005 of the
3 Energy Act of 2020 (42 U.S.C. 6311 note; Public
4 Law 116–260); and

5 (2) \$5,000,000 for the energy efficient trans-
6 former rebate program authorized under section
7 1006 of the Energy Act of 2020 (42 U.S.C. 6317
8 note; Public Law 116–260).

9 **SEC. 5406. MODEL GUIDANCE FOR COMBINED HEAT AND**
10 **POWER SYSTEMS AND WASTE HEAT TO**
11 **POWER SYSTEMS.**

12 (a) DEFINITIONS.—In this section:

13 (1) ADDITIONAL SERVICES.—The term “addi-
14 tional services” means the provision of supple-
15 mentary power, backup or standby power, mainte-
16 nance power, or interruptible power to an electric
17 consumer by an electric utility.

18 (2) WASTE HEAT TO POWER SYSTEM.—

19 (A) IN GENERAL.—The term “waste heat
20 to power system” means a system that gen-
21 erates electricity through the recovery of waste
22 energy.

23 (B) EXCLUSION.—The term “waste heat
24 to power system” does not include a system
25 that generates electricity through the recovery

1 of a heat resource from a process the primary
2 purpose of which is the generation of electricity
3 using a fossil fuel.

4 (3) OTHER TERMS.—

5 (A) PURPA.—The terms “electric con-
6 sumer”, “electric utility”, “interconnection
7 service”, “nonregulated electric utility”, and
8 “State regulatory authority” have the meanings
9 given those terms in the Public Utility Regu-
10 latory Policies Act of 1978 (16 U.S.C. 2601 et
11 seq.), within the meaning of title I of that Act
12 (16 U.S.C. 2611 et seq.).

13 (B) EPCA.—The terms “combined heat
14 and power system” and “waste energy” have
15 the meanings given those terms in section 371
16 of the Energy Policy and Conservation Act (42
17 U.S.C. 6341).

18 (b) REVIEW.—

19 (1) IN GENERAL.—Not later than 180 days
20 after the date of enactment of this Act, the Sec-
21 retary, in consultation with the Federal Energy Reg-
22 ulatory Commission and other appropriate entities,
23 shall review existing rules and procedures relating to
24 interconnection service and additional services
25 throughout the United States for electric generation

1 with nameplate capacity up to 20 megawatts to
2 identify barriers to the deployment of combined heat
3 and power systems and waste heat to power systems.

4 (2) INCLUSION.—The review under this sub-
5 section shall include a review of existing rules and
6 procedures relating to—

7 (A) determining and assigning costs of
8 interconnection service and additional services;
9 and

10 (B) ensuring adequate cost recovery by an
11 electric utility for interconnection service and
12 additional services.

13 (c) MODEL GUIDANCE.—

14 (1) IN GENERAL.—Not later than 18 months
15 after the date of enactment of this Act, the Sec-
16 retary, in consultation with the Federal Energy Reg-
17 ulatory Commission and other appropriate entities,
18 shall issue model guidance for interconnection serv-
19 ice and additional services for consideration by State
20 regulatory authorities and nonregulated electric utili-
21 ties to reduce the barriers identified under sub-
22 section (b)(1).

23 (2) CURRENT BEST PRACTICES.—The model
24 guidance issued under this subsection shall reflect,
25 to the maximum extent practicable, current best

1 practices to encourage the deployment of combined
2 heat and power systems and waste heat to power
3 systems while ensuring the safety and reliability of
4 the interconnected units and the distribution and
5 transmission networks to which the units connect,
6 including—

7 (A) relevant current standards developed
8 by the Institute of Electrical and Electronic En-
9 gineers; and

10 (B) model codes and rules adopted by—

11 (i) States; or

12 (ii) associations of State regulatory
13 agencies.

14 (3) FACTORS FOR CONSIDERATION.—In estab-
15 lishing the model guidance under this subsection, the
16 Secretary shall take into consideration—

17 (A) the appropriateness of using standards
18 or procedures for interconnection service that
19 vary based on unit size, fuel type, or other rel-
20 evant characteristics;

21 (B) the appropriateness of establishing
22 fast-track procedures for interconnection serv-
23 ice;

24 (C) the value of consistency with Federal
25 interconnection rules established by the Federal

1 Energy Regulatory Commission as of the date
2 of enactment of this Act;

3 (D) the best practices used to model out-
4 age assumptions and contingencies to determine
5 fees or rates for additional services;

6 (E) the appropriate duration, magnitude,
7 or usage of demand charge ratchets;

8 (F) potential alternative arrangements
9 with respect to the procurement of additional
10 services, including—

11 (i) contracts tailored to individual
12 electric consumers for additional services;

13 (ii) procurement of additional services
14 by an electric utility from a competitive
15 market; and

16 (iii) waivers of fees or rates for addi-
17 tional services for small electric consumers;

18 and

19 (G) outcomes such as increased electric re-
20 liability, fuel diversification, enhanced power
21 quality, and reduced electric losses that may re-
22 sult from increased use of combined heat and
23 power systems and waste heat to power sys-
24 tems.

1 **TITLE VI—METHANE**
2 **REDUCTION INFRASTRUCTURE**

3 **SEC. 6001. ORPHANED WELL SITE PLUGGING, REMEDI-**
4 **ATION, AND RESTORATION.**

5 Section 349 of the Energy Policy Act of 2005 (42
6 U.S.C. 15907) is amended to read as follows:

7 **“SEC. 349. ORPHANED WELL SITE PLUGGING, REMEDI-**
8 **ATION, AND RESTORATION.**

9 “(a) DEFINITIONS.—In this section:

10 “(1) FEDERAL LAND.—The term ‘Federal land’
11 means land administered by a land management
12 agency within—

13 “(A) the Department of Agriculture; or

14 “(B) the Department of the Interior.

15 “(2) IDLED WELL.—The term ‘idled well’
16 means a well—

17 “(A) that has been nonoperational for not
18 fewer than 4 years; and

19 “(B) for which there is no anticipated ben-
20 eficial future use.

21 “(3) INDIAN TRIBE.—The term ‘Indian Tribe’
22 has the meaning given the term in section 4 of the
23 Indian Self-Determination and Education Assistance
24 Act (25 U.S.C. 5304).

1 “(4) OPERATOR.—The term ‘operator’, with re-
2 spect to an oil or gas operation, means any entity,
3 including a lessee or operating rights owner, that
4 has provided to a relevant authority a written state-
5 ment that the entity is responsible for the oil or gas
6 operation, or any portion of the operation.

7 “(5) ORPHANED WELL.—The term ‘orphaned
8 well’—

9 “(A) with respect to Federal land or Tribal
10 land, means a well—

11 “(i) that is not used for an authorized
12 purpose, such as production, injection, or
13 monitoring; and

14 “(ii)(I) for which no operator can be
15 located; or

16 “(II) the operator of which is un-
17 able—

18 “(aa) to plug the well; and

19 “(bb) to remediate and reclaim
20 the well site; and

21 “(B) with respect to State or private
22 land—

23 “(i) has the meaning given the term
24 by the applicable State; or

1 “(ii) if that State uses different termi-
2 nology, has the meaning given another
3 term used by the State to describe a well
4 eligible for plugging, remediation, and rec-
5 lamation by the State.

6 “(6) TRIBAL LAND.—The term ‘Tribal land’
7 means any land or interest in land owned by an In-
8 dian Tribe, the title to which is—

9 “(A) held in trust by the United States; or

10 “(B) subject to a restriction against alien-
11 ation under Federal law.

12 “(b) FEDERAL PROGRAM.—

13 “(1) ESTABLISHMENT.—Not later than 60 days
14 after the date of enactment of the Energy Infra-
15 structure Act, the Secretary shall establish a pro-
16 gram to plug, remediate, and reclaim orphaned wells
17 located on Federal land.

18 “(2) INCLUDED ACTIVITIES.—The program
19 under this subsection shall—

20 “(A) include a method of—

21 “(i) identifying, characterizing, and
22 inventorying orphaned wells and associated
23 pipelines, facilities, and infrastructure on
24 Federal land; and

1 “(ii) ranking those orphaned wells for
2 priority in plugging, remediation, and rec-
3 lamation, based on—
4 “(I) public health and safety;
5 “(II) potential environmental
6 harm; and
7 “(III) other subsurface impacts
8 or land use priorities;
9 “(B) distribute funding in accordance with
10 the priorities established under subparagraph
11 (A)(ii) for—
12 “(i) plugging orphaned wells;
13 “(ii) remediating and reclaiming well
14 pads and facilities associated with or-
15 phaned wells;
16 “(iii) remediating soil and restoring
17 native species habitat that has been de-
18 graded due to the presence of orphaned
19 wells and associated pipelines, facilities,
20 and infrastructure; and
21 “(iv) remediating land adjacent to or-
22 phaned wells and decommissioning or re-
23 moving associated pipelines, facilities, and
24 infrastructure;

1 “(C) provide a public accounting of the
2 costs of plugging, remediation, and reclamation
3 for each orphaned well;

4 “(D) seek to determine the identities of po-
5 tentially responsible parties associated with the
6 orphaned well (or a surety or guarantor of such
7 a party), to the extent such information can be
8 ascertained, and make efforts to obtain reim-
9 bursement for expenditures to the extent prac-
10 ticable;

11 “(E) measure and track—

12 “(i) emissions of methane and other
13 gases associated with orphaned wells; and

14 “(ii) contamination of groundwater or
15 surface water associated with orphaned
16 wells; and

17 “(F) identify and address any dispro-
18 portionate burden of adverse human health or envi-
19 ronmental effects of orphaned wells on commu-
20 nities of color, low-income communities, and
21 Tribal and indigenous communities.

22 “(3) IDLED WELLS.—The Secretary, acting
23 through the Director of the Bureau of Land Man-
24 agement, shall—

1 “(A) periodically review all idled wells on
2 Federal land; and

3 “(B) reduce the inventory of idled wells on
4 Federal land.

5 “(4) COOPERATION AND CONSULTATION.—In
6 carrying out the program under this subsection, the
7 Secretary shall—

8 “(A) work cooperatively with—

9 “(i) the Secretary of Agriculture;

10 “(ii) affected Indian Tribes; and

11 “(iii) each State within which Federal
12 land is located; and

13 “(B) consult with—

14 “(i) the Secretary of Energy; and

15 “(ii) the Interstate Oil and Gas Com-
16 pact Commission.

17 “(c) FUNDING FOR STATE PROGRAMS.—

18 “(1) IN GENERAL.—The Secretary shall provide
19 to States, in accordance with this subsection—

20 “(A) initial grants under paragraph (3);

21 “(B) formula grants under paragraph (4);

22 and

23 “(C) performance grants under paragraph
24 (5).

25 “(2) ACTIVITIES.—

1 “(A) IN GENERAL.—A State may use
2 funding provided under this subsection for any
3 of the following purposes:

4 “(i) To plug, remediate, and reclaim
5 orphaned wells located on State-owned or
6 privately owned land.

7 “(ii) To identify and characterize un-
8 documented orphaned wells on State and
9 private land.

10 “(iii) To rank orphaned wells based
11 on factors including—

12 “(I) public health and safety;

13 “(II) potential environmental
14 harm; and

15 “(III) other land use priorities.

16 “(iv) To make information regarding
17 the use of funds received under this sub-
18 section available on a public website.

19 “(v) To measure and track—

20 “(I) emissions of methane and
21 other gases associated with orphaned
22 wells; and

23 “(II) contamination of ground-
24 water or surface water associated with
25 orphaned wells.

1 “(vi) To remediate soil and restore
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.

6 “(vii) To remediate land adjacent to
7 orphaned wells and decommission or re-
8 move associated pipelines, facilities, and in-
9 frastructure.

10 “(viii) To identify and address any
11 disproportionate burden of adverse human
12 health or environmental effects of or-
13 phaned wells on communities of color, low-
14 income communities, and Tribal and indig-
15 enous communities.

16 “(ix) Subject to subparagraph (B), to
17 administer a program to carry out any ac-
18 tivities described in clauses (i) through
19 (viii).

20 “(B) ADMINISTRATIVE COST LIMITA-
21 TION.—

22 “(i) IN GENERAL.—Except as pro-
23 vided in clause (ii), a State shall not use
24 more than 10 percent of the funds received
25 under this subsection during a fiscal year

1 for administrative costs under subpara-
2 graph (A)(ix).

3 “(ii) EXCEPTION.—The limitation
4 under clause (i) shall not apply to funds
5 used by a State as described in paragraph
6 (3)(A)(ii).

7 “(3) INITIAL GRANTS.—

8 “(A) IN GENERAL.—The Secretary shall
9 distribute—

10 “(i) not more than \$25,000,000 to
11 each State that submits to the Secretary,
12 by not later than 180 days after the date
13 of enactment of Energy Infrastructure Act,
14 a request for funding under this clause, in-
15 cluding—

16 “(I) an estimate of the number
17 of jobs that will be created or saved
18 through the activities proposed to be
19 funded; and

20 “(II) a certification that—

21 “(aa) the State is a Member
22 State or Associate Member State
23 of the Interstate Oil and Gas
24 Compact Commission;

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1 “(bb) there are 1 or more
2 documented orphaned wells lo-
3 cated in the State; and

4 “(cc) the State will use not
5 less than 90 percent of the fund-
6 ing requested under this sub-
7 section to issue new contracts,
8 amend existing contracts, or
9 issue grants for plugging, remedi-
10 ation, and reclamation work by
11 not later than 90 days after the
12 date of receipt of the funds; and

13 “(ii) not more than \$5,000,000 to
14 each State that—

15 “(I) requests funding under this
16 clause;

17 “(II) does not receive a grant
18 under clause (i); and

19 “(III) certifies to the Secretary
20 that—

21 “(aa) the State—

22 “(AA) has in effect a
23 plugging, remediation, and
24 reclamation program for or-
25 phaned wells; or

1 “(BB) the capacity to
2 initiate such a program; or

3 “(bb) the funds provided
4 under this paragraph will be used
5 to carry out any administrative
6 actions necessary to develop an
7 application for a formula grant
8 under paragraph (4) or a per-
9 formance grant under paragraph
10 (5).

11 “(B) DISTRIBUTION.—The Secretary shall
12 distribute funds to a State under this para-
13 graph by not later than the date that is 30 days
14 after the date on which the State submits to
15 the Secretary the certification required under
16 clause (i)(II) or (ii)(III) of subparagraph (A),
17 as applicable.

18 “(C) DEADLINE FOR EXPENDITURE.—A
19 State that receives funds under this paragraph
20 shall reimburse the Secretary in an amount
21 equal to the amount of the funds that remain
22 unobligated on the date that is 1 year after the
23 date of receipt of the funds.

24 “(D) REPORT.—Not later than 15 months
25 after the date on which a State receives funds

1 under this paragraph, the State shall submit to
2 the Secretary a report that describes the means
3 by which the State used the funds in accord-
4 ance with the certification submitted by the
5 State under subparagraph (A).

6 “(4) FORMULA GRANTS.—

7 “(A) ESTABLISHMENT.—

8 “(i) IN GENERAL.—The Secretary
9 shall establish a formula for the distribu-
10 tion to each State described in clause (ii)
11 of funds under this paragraph.

12 “(ii) DESCRIPTION OF STATES.—A
13 State referred to in clause (i) is a State
14 that, by not later than 45 days after the
15 date of enactment of the Energy Infra-
16 structure Act, submits to the Secretary a
17 notice of the intent of the State to submit
18 an application under subparagraph (B), in-
19 cluding a description of the factors de-
20 scribed in clause (iii) with respect to the
21 State.

22 “(iii) FACTORS.—The formula estab-
23 lished under clause (i) shall account for,
24 with respect to an applicant State, the fol-
25 lowing factors:

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1 “(I) Job losses in the oil and gas
2 industry in the State during the pe-
3 riod—

4 “(aa) beginning on March 1,
5 2020; and

6 “(bb) ending on the date of
7 enactment of the Energy Infra-
8 structure Act.

9 “(II) The number of documented
10 orphaned wells located in the State,
11 and the projected cost—

12 “(aa) to plug or reclaim
13 those orphaned wells;

14 “(bb) to reclaim adjacent
15 land; and

16 “(cc) to decommission or re-
17 move associated pipelines, facili-
18 ties, and infrastructure.

19 “(iv) PUBLICATION.—Not later than
20 75 days after the date of enactment of the
21 Energy Infrastructure Act, the Secretary
22 shall publish on a public website the
23 amount that each State is eligible to re-
24 ceive under the formula under this sub-
25 paragraph.

1 “(B) APPLICATION.—To be eligible to re-
2 ceive a formula grant under this paragraph, a
3 State shall submit to the Secretary an applica-
4 tion that includes—

5 “(i) a description of—

6 “(I) the State program for or-
7 phaned well plugging, remediation,
8 and restoration, including legal au-
9 thorities, processes used to identify
10 and prioritize orphaned wells, procure-
11 ment mechanisms, and other program
12 elements demonstrating the readiness
13 of the State to carry out proposed ac-
14 tivities using the grant;

15 “(II) the activities to be carried
16 out with the grant, including an iden-
17 tification of the estimated health,
18 safety, habitat, and environmental
19 benefits of plugging, remediating, or
20 reclaiming orphaned wells; and

21 “(III) the means by which the in-
22 formation regarding the activities of
23 the State under this paragraph will be
24 made available on a public website;

25 “(ii) an estimate of—

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1 “(I) the number of orphaned
2 wells in the State that will be plugged,
3 remediated, or reclaimed;

4 “(II) the projected cost of—

5 “(aa) plugging, remediating,
6 or reclaiming orphaned wells;

7 “(bb) remediating or re-
8 claiming adjacent land; and

9 “(cc) decommissioning or re-
10 moving associated pipelines, fa-
11 cilities, and infrastructure;

12 “(III) the amount of that pro-
13 jected cost that will be offset by the
14 forfeiture of financial assurance in-
15 struments, the estimated salvage of
16 well site equipment, or other proceeds
17 from the orphaned wells and adjacent
18 land;

19 “(IV) the number of jobs that
20 will be created or saved through the
21 activities to be funded under this
22 paragraph; and

23 “(V) the amount of funds to be
24 spent on administrative costs;

1 “(iii) a certification that any financial
2 assurance instruments available to cover
3 plugging, remediation, or reclamation costs
4 will be used by the State; and

5 “(iv) the definitions and processes
6 used by the State to formally identify a
7 well as—

8 “(I) an orphaned well; or

9 “(II) if the State uses different
10 terminology, otherwise eligible for
11 plugging, remediation, and reclama-
12 tion by the State.

13 “(C) DISTRIBUTION.—The Secretary shall
14 distribute funds to a State under this para-
15 graph by not later than the date that is 60 days
16 after the date on which the State submits to
17 the Secretary a completed application under
18 subparagraph (B).

19 “(D) DEADLINE FOR EXPENDITURE.—A
20 State that receives funds under this paragraph
21 shall reimburse the Secretary in an amount
22 equal to the amount of the funds that remain
23 unobligated on the date that is 5 years after the
24 date of receipt of the funds.

1 “(E) CONSULTATION.—In making a deter-
2 mination under this paragraph regarding the
3 eligibility of a State to receive a formula grant,
4 the Secretary shall consult with—

5 “(i) the Administrator of the Environ-
6 mental Protection Agency;

7 “(ii) the Secretary of Energy; and

8 “(iii) the Interstate Oil and Gas Com-
9 pact Commission.

10 “(5) PERFORMANCE GRANTS.—

11 “(A) ESTABLISHMENT.—The Secretary
12 shall provide to States, in accordance with this
13 paragraph—

14 “(i) regulatory improvement grants
15 under subparagraph (E); and

16 “(ii) matching grants under subpara-
17 graph (F).

18 “(B) APPLICATION.—To be eligible to re-
19 ceive a grant under this paragraph, a State
20 shall submit to the Secretary an application in-
21 cluding—

22 “(i) each element described in an ap-
23 plication for a grant under paragraph
24 (4)(B);

1 “(ii) activities carried out by the State
2 to address orphaned wells located in the
3 State, including—

4 “(I) increasing State spending on
5 well plugging, remediation, and rec-
6 lamation; or

7 “(II) improving regulation of oil
8 and gas wells; and

9 “(iii) the means by which the State
10 will use funds provided under this para-
11 graph—

12 “(I) to lower unemployment in
13 the State; and

14 “(II) to improve economic condi-
15 tions in economically distressed areas
16 of the State.

17 “(C) DISTRIBUTION.—The Secretary shall
18 distribute funds to a State under this para-
19 graph by not later than the date that is 60 days
20 after the date on which the State submits to
21 the Secretary a completed application under
22 subparagraph (B).

23 “(D) CONSULTATION.—In making a deter-
24 mination under this paragraph regarding the
25 eligibility of a State to receive a grant under

1 subparagraph (E) or (F), the Secretary shall
2 consult with—

3 “(i) the Administrator of the Environ-
4 mental Protection Agency;

5 “(ii) the Secretary of Energy; and

6 “(iii) the Interstate Oil and Gas Com-
7 pact Commission.

8 “(E) REGULATORY IMPROVEMENT
9 GRANTS.—

10 “(i) IN GENERAL.—Beginning on the
11 date that is 180 days after the date on
12 which an initial grant is provided to a
13 State under paragraph (3), the Secretary
14 shall provide to the State a regulatory im-
15 provement grant under this subparagraph,
16 if the State meets, during the 10-year pe-
17 riod ending on the date on which the State
18 submits to the Secretary an application
19 under subparagraph (B), 1 of the following
20 criteria:

21 “(I) The State has strengthened
22 plugging standards and procedures
23 designed to ensure that wells located
24 in the State are plugged in an effec-
25 tive manner that protects ground-

1 water and other natural resources,
2 public health and safety, and the envi-
3 ronment.

4 “(II) The State has made im-
5 provements to State programs de-
6 signed to reduce future orphaned well
7 burdens, such as financial assurance
8 reform, alternative funding mecha-
9 nisms for orphaned well programs,
10 and reforms to programs relating to
11 well transfer or temporary abandon-
12 ment.

13 “(ii) LIMITATIONS.—

14 “(I) NUMBER.—The Secretary
15 may issue to a State under this sub-
16 paragraph not more than 1 grant for
17 each criterion described in subclause
18 (I) or (II) of clause (i).

19 “(II) MAXIMUM AMOUNT.—The
20 amount of a single grant provided to
21 a State under this subparagraph shall
22 be not more than \$20,000,000.

23 “(iii) REIMBURSEMENT FOR FAILURE
24 TO MAINTAIN PROTECTIONS.—A State that
25 receives a grant under this subparagraph

1 shall reimburse the Secretary in an
2 amount equal to the amount of the grant
3 in any case in which, during the 10-year
4 period beginning on the date of receipt of
5 the grant, the State enacts a law or regula-
6 tion that, if in effect on the date of sub-
7 mission of the application under subpara-
8 graph (B), would have prevented the State
9 from being eligible to receive the grant
10 under clause (i).

11 “(F) MATCHING GRANTS.—

12 “(i) IN GENERAL.—Beginning on the
13 date that is 180 days after the date on
14 which an initial grant is provided to a
15 State under paragraph (3), the Secretary
16 shall provide to the State funding, in an
17 amount equal to the difference between—

18 “(I) the average annual amount
19 expended by the State during the pe-
20 riod of fiscal years 2010 through
21 2019—

22 “(aa) to plug, remediate,
23 and reclaim orphaned wells; and

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1 “(bb) to decommission or re-
2 move associated pipelines, facili-
3 ties, or infrastructure; and

4 “(II) the amount that the State
5 certifies to the Secretary the State
6 will expend, during the fiscal year in
7 which the State will receive the grant
8 under this subparagraph—

9 “(aa) to plug, remediate,
10 and reclaim orphaned wells;

11 “(bb) to remediate or re-
12 claim adjacent land; and

13 “(cc) to decommission or re-
14 move associated pipelines, facili-
15 ties, and infrastructure.

16 “(ii) LIMITATIONS.—

17 “(I) FISCAL YEAR.—The Sec-
18 retary may issue to a State under this
19 subparagraph not more than 1 grant
20 for each fiscal year.

21 “(II) TOTAL FUNDS PRO-
22 VIDED.—The Secretary may provide
23 to a State under this subparagraph a
24 total amount equal to not more than

1 \$30,000,000 during the period of fis-
2 cal years 2022 through 2031.

3 “(d) TRIBAL ORPHANED WELL SITE PLUGGING, RE-
4 MEDIATION, AND RESTORATION.—

5 “(1) ESTABLISHMENT.—The Secretary shall es-
6 tablish in the Bureau of Indian Affairs a program
7 under which the Secretary shall provide to Indian
8 Tribes grants in accordance with this subsection.

9 “(2) ELIGIBLE ACTIVITIES.—

10 “(A) IN GENERAL.—An Indian Tribe may
11 use a grant received under this subsection—

12 “(i) to plug, remediate, or reclaim an
13 orphaned well on Tribal land of the Indian
14 Tribe;

15 “(ii) to remediate soil and restore na-
16 tive species habitat that has been degraded
17 due to the presence of an orphaned well or
18 associated pipelines, facilities, or infra-
19 structure on Tribal land;

20 “(iii) to remediate Tribal land adja-
21 cent to orphaned wells and decommission
22 or remove associated pipelines, facilities,
23 and infrastructure;

24 “(iv) to provide an online public ac-
25 counting of the cost of plugging, remedi-

1 ation, and reclamation for each orphaned
2 well site on Tribal land;

3 “**(v)** to identify and characterize un-
4 documented orphaned wells on Tribal land;
5 and

6 “**(vi)** to develop or administer a Tribal
7 program to carry out any activities de-
8 scribed in clauses **(i)** through **(v)**.

9 “**(B)** ADMINISTRATIVE COST LIMITA-
10 TION.—

11 “**(i)** IN GENERAL.—Except as pro-
12 vided in clause **(ii)**, an Indian Tribe shall
13 not use more than 10 percent of the funds
14 received under this subsection during a fis-
15 cal year for administrative costs under
16 subparagraph **(A)(vi)**.

17 “**(ii)** EXCEPTION.—The limitation
18 under clause **(i)** shall not apply to any
19 funds used to carry out an administrative
20 action necessary for the development of a
21 Tribal program described in subparagraph
22 **(A)(vi)**.

23 “**(3)** FACTORS FOR CONSIDERATION.—In deter-
24 mining whether to provide to an Indian Tribe a

1 grant under this subsection, the Secretary shall take
2 into consideration—

3 “(A) the unemployment rate of the Indian
4 Tribe on the date on which the Indian Tribe
5 submits an application under paragraph (4);
6 and

7 “(B) the estimated number of orphaned
8 wells on the Tribal land of the Indian Tribe.

9 “(4) APPLICATION.—To be eligible to receive a
10 grant under this subsection, an Indian Tribe shall
11 submit to the Secretary an application that in-
12 cludes—

13 “(A) a description of—

14 “(i) the Tribal program for orphaned
15 well plugging, remediation, and restora-
16 tion, including legal authorities, processes
17 used to identify and prioritize orphaned
18 wells, procurement mechanisms, and other
19 program elements demonstrating the readi-
20 ness of the Indian Tribe to carry out the
21 proposed activities, or plans to develop
22 such a program; and

23 “(ii) the activities to be carried out
24 with the grant, including an identification
25 of the estimated health, safety, habitat,

1 and environmental benefits of plugging, re-
2 mediating, or reclaiming orphaned wells
3 and remediating or reclaiming adjacent
4 land; and

5 “(B) an estimate of—

6 “(i) the number of orphaned wells
7 that will be plugged, remediated, or re-
8 claimed; and

9 “(ii) the projected cost of—

10 “(I) plugging, remediating, or re-
11 claiming orphaned wells;

12 “(II) remediating or reclaiming
13 adjacent land; and

14 “(III) decommissioning or remov-
15 ing associated pipelines, facilities, and
16 infrastructure.

17 “(5) DISTRIBUTION.—The Secretary shall dis-
18 tribute funds to an Indian Tribe under this sub-
19 section by not later than the date that is 60 days
20 after the date on which the Indian Tribe submits to
21 the Secretary a completed application under para-
22 graph (4).

23 “(6) DEADLINE FOR EXPENDITURE.—An In-
24 dian Tribe that receives funds under this subsection
25 shall reimburse the Secretary in an amount equal to

1 the amount of the funds that remain unobligated on
2 the date that is 5 years after the date of receipt of
3 the funds.

4 “(7) DELEGATION TO SECRETARY.—

5 “(A) IN GENERAL.—An Indian Tribe on
6 the Tribal land of which is located an orphaned
7 well may submit to the Secretary a request for
8 the Secretary to administer and carry out plug-
9 ging, remediation, and reclamation activities re-
10 lating to the orphaned well on behalf of the In-
11 dian Tribe.

12 “(B) TREATMENT.—For the purposes of
13 subsection (b), an orphaned well with respect to
14 which an Indian Tribe of jurisdiction has sub-
15 mitted to the Secretary a request under sub-
16 paragraph (A) shall be considered to be located
17 on Federal land administered by a land man-
18 agement agency within the Department of the
19 Interior.

20 “(e) TECHNICAL ASSISTANCE.—The Secretary of
21 Energy, in cooperation with the Secretary and the Inter-
22 state Oil and Gas Compact Commission, shall provide
23 technical assistance to the Federal land management
24 agencies and oil and gas producing States and Indian
25 Tribes to support practical and economical remedies for

1 environmental problems caused by orphaned wells on Fed-
2 eral land, Tribal land, and State and private land, includ-
3 ing the sharing of best practices in the management of
4 oil and gas well inventories to ensure the availability of
5 funds to plug, remediate, and restore oil and gas well sites
6 on cessation of operation.

7 “(f) REPORT TO CONGRESS.—Not later than 1 year
8 after the date of enactment of the Energy Infrastructure
9 Act, and not less frequently than annually thereafter, the
10 Secretary shall submit to the Committees on Appropria-
11 tions and Energy and Natural Resources of the Senate
12 and the Committees on Appropriations and Natural Re-
13 sources of the House of Representatives a report describ-
14 ing the program established and grants awarded under
15 this section, including—

16 “(1) an updated inventory of wells located on
17 Federal land, Tribal land, and State and private
18 land that are—

19 “(A) orphaned wells; or

20 “(B) at risk of becoming orphaned wells;

21 “(2) an estimate of the quantities of—

22 “(A) methane and other gasses emitted
23 from orphaned wells; and

1 “(B) emissions reduced as a result of plug-
2 ging, remediating, and reclaiming orphaned
3 wells;

4 “(3) the number of jobs created and saved
5 through the plugging, remediation, and reclamation
6 of orphaned wells; and

7 “(4) the acreage of habitat restored using
8 grants awarded to plug, remediate, and reclaim or-
9 phaned wells and to remediate or reclaim adjacent
10 land, together with a description of the purposes for
11 which that land is likely to be used in the future.

12 “(g) EFFECT OF SECTION.—

13 “(1) NO EXPANSION OF LIABILITY.—Nothing in
14 this section establishes or expands the responsibility
15 or liability of any entity with respect to—

16 “(A) plugging any well; or

17 “(B) remediating or reclaiming any well
18 site.

19 “(2) TRIBAL LAND.—Nothing in this section—

20 “(A) relieves the Secretary of any obliga-
21 tion under section 3 of the Act of May 11, 1938
22 (25 U.S.C. 396c; 52 Stat. 348, chapter 198), to
23 plug, remediate, or reclaim an orphaned well lo-
24 cated on Tribal land; or

1 “(B) absolves the United States from a re-
2 sponsibility to plug, remediate, or reclaim an
3 orphaned well located on Tribal land or any
4 other responsibility to an Indian Tribe, includ-
5 ing any responsibility that derives from—

6 “(i) the trust relationship between the
7 United States and Indian Tribes;

8 “(ii) any treaty, law, or Executive
9 order; or

10 “(iii) any agreement between the
11 United States and an Indian Tribe.

12 “(3) OWNER OR OPERATOR NOT ABSOLVED.—
13 Nothing in this section absolves the owner or oper-
14 ator of an oil or gas well of any potential liability
15 for—

16 “(A) reimbursement of any plugging or
17 reclamation costs associated with the well; or

18 “(B) any adverse effect of the well on the
19 environment.

20 “(h) FUNDING.—

21 “(1) APPROPRIATIONS.—Out of any amounts in
22 the Treasury not otherwise appropriated, the Sec-
23 retary of the Treasury shall transfer the following
24 amounts, to remain available until September 30,
25 2030:

1 “(A) To the Secretary—

2 “(i) \$250,000,000 to carry out the
3 program under subsection (b);

4 “(ii) \$775,000,000 to provide grants
5 under subsection (c)(3);

6 “(iii) \$2,000,000,000 to provide
7 grants under subsection (c)(4);

8 “(iv) \$1,500,000,000 to provide
9 grants under subsection (c)(5); and

10 “(v) \$150,000,000 to carry out the
11 program under subsection (d).

12 “(B) To the Secretary of Energy,
13 \$30,000,000 to conduct research and develop-
14 ment activities in cooperation with the Inter-
15 state Oil and Gas Compact Commission to as-
16 sist the Federal land management agencies,
17 States, and Indian Tribes in—

18 “(i) identifying and characterizing un-
19 documented orphaned wells; and

20 “(ii) mitigating the environmental
21 risks of undocumented orphaned wells.

22 “(C) To the Interstate Oil and Gas Com-
23 pact Commission, \$2,000,000 to carry out this
24 section.

1 “(2) RECEIPT AND ACCEPTANCE.—The Sec-
2 retary, the Secretary of Energy, and the Interstate
3 Oil and Gas Compact Commission shall be entitled
4 to receive, shall accept, and shall use to carry out
5 this section the funds transferred under subpara-
6 graphs (A), (B), and (C), respectively, of paragraph
7 (1), without further appropriation.”.

8 **SEC. 6002. NEPA REVIEW OF CERTAIN PIPELINE PLACE-**
9 **MENT ACTIVITIES.**

10 Section 390 of the Energy Policy Act of 2005 (42
11 U.S.C. 15942) is amended—

12 (1) in subsection (b)(4), by striking “pipeline in
13 an approved” and inserting “pipeline, or a field or
14 a field compression or pumping unit associated with
15 a pipeline, in any existing disturbed area so long as
16 the disturbance was authorized and occurred within
17 the 5 years prior to the date of placement of the
18 pipeline, or in an existing or approved”; and

19 (2) by adding at the end the following:

20 “(c) EFFECT.—The presumption under subsection
21 (a) shall be considered to be rebutted if the Secretary of
22 the Interior or the Secretary of Agriculture, as applicable,
23 determines that extraordinary circumstances preclude the
24 use of such a categorical exclusion.”.

1 **TITLE VII—ABANDONED MINE**
2 **LAND RECLAMATION**

3 **SEC. 7001. ABANDONED MINE RECLAMATION FUND DIRECT**
4 **APPROPRIATIONS.**

5 (a) IN GENERAL.—In addition to amounts otherwise
6 made available, there is appropriated, for deposit into the
7 Abandoned Mine Reclamation Fund established by section
8 401(a) of the Surface Mining Control and Reclamation
9 Act of 1977 (30 U.S.C. 1231(a)), out of any amounts in
10 the Treasury not otherwise appropriated,
11 \$11,293,000,000 for fiscal year 2021, to remain available
12 until expended.

13 (b) USE OF FUNDS.—

14 (1) IN GENERAL.—Subject to subsection (f),
15 amounts appropriated under subsection (a) shall be
16 used to provide grants, as expeditiously as prac-
17 ticable but by not later than September 30, 2036, to
18 States and Indian Tribes described in paragraph (2)
19 for abandoned mine land and water reclamation
20 projects under the Surface Mining Control and Rec-
21 lamation Act of 1977 (30 U.S.C. 1201 et seq.).

22 (2) ELIGIBLE GRANT RECIPIENTS.—Grants
23 may be made under paragraph (1) to—

24 (A) States and Indian Tribes that have a
25 State or Tribal program approved under section

1 405 of the Surface Mining Control and Rec-
2 lamation Act of 1977 (30 U.S.C. 1235); and

3 (B) States and Indian Tribes that are re-
4 ferred to in section 402(g)(8)(B) of that Act
5 (30 U.S.C. 1232(g)(8)(B)).

6 (c) ALLOCATION.—Grant amounts under subsection
7 (b)(1) shall be allocated based on the proportion of
8 unreclaimed eligible land and water the State or Indian
9 Tribe has in the inventory maintained under section
10 403(c) of the Surface Mining Control and Reclamation
11 Act of 1977 (30 U.S.C. 1233(c)).

12 (d) TOTAL AMOUNT OF GRANT.—The total amount
13 of grant funding provided under subsection (b)(1) to an
14 eligible Indian Tribe shall be not less than \$20,000,000,
15 to the extent that the amount needed for reclamation
16 projects described in this paragraph on the land of the
17 Indian Tribe is not less than \$20,000,000.

18 (e) PRIORITY.—In addition to the priorities described
19 in section 403(a) of the Surface Mining Control and Rec-
20 lamation Act of 1977 (30 U.S.C. 1233(a)), in providing
21 grants under this section, priority may also be given to
22 reclamation projects described in subsection (b)(1) that
23 provide employment for former coal mine workers.

24 (f) RESERVATION.—Of the funds made available by
25 subsection (a), \$50,000,000 shall be made available to the

1 Secretary of the Interior to provide States and Indian
2 Tribes with the financial and technical assistance nec-
3 essary for the purpose of making amendments to the in-
4 ventory maintained under section 403(c) of the Surface
5 Mining Control and Reclamation Act of 1977 (30 U.S.C.
6 1233(c)).

7 **TITLE VIII—NATURAL RE-**
8 **SOURCES-RELATED INFRA-**
9 **STRUCTURE, WILDFIRE MAN-**
10 **AGEMENT, AND ECOSYSTEM**
11 **RESTORATION**

12 **SEC. 8001. FOREST SERVICE LEGACY ROAD AND TRAIL RE-**
13 **MEDIATION PROGRAM.**

14 Public Law 88–657 (16 U.S.C. 532 et seq.) (com-
15 monly known as the “Forest Roads and Trails Act”) is
16 amended by adding at the end the following:

17 **“SEC. 8. FOREST SERVICE LEGACY ROAD AND TRAIL REME-**
18 **DIATION PROGRAM.**

19 “(a) ESTABLISHMENT.—The Secretary shall estab-
20 lish the Forest Service Legacy Road and Trail Remedi-
21 ation Program (referred to in this section as the ‘Pro-
22 gram’).

23 “(b) ACTIVITIES.—In carrying out the Program, the
24 Secretary shall, taking into account foreseeable changes
25 in weather and hydrology—

1 “(1) restore passages for fish and other aquatic
2 species by removing, repairing, or replacing unnatu-
3 ral barriers from those passages;

4 “(2) decommission unauthorized user-created
5 roads and trails that are not a National Forest Sys-
6 tem road or a National Forest System trail;

7 “(3) prepare National Forest System roads for
8 long-term storage, in accordance with subsections
9 (c)(1) and (d), in a manner that—

10 “(A) prevents motor vehicle use;

11 “(B) prevents the roads from damaging
12 adjacent resources, including aquatic and wild-
13 life resources;

14 “(C) reduces or eliminates the need for
15 road maintenance; and

16 “(D) preserves the roads for future use;

17 “(4) decommission National Forest System
18 roads and trails in accordance with subsections
19 (c)(1) and (d);

20 “(5) relocate National Forest System roads and
21 trails to increase storm resilience; and

22 “(6) convert National Forest System roads to
23 National Forest System trails.

24 “(c) PROJECT SELECTION.—

25 “(1) PROJECT ELIGIBILITY.—

1 “(A) IN GENERAL.—The Secretary may
2 only fund under the Program a project de-
3 scribed in paragraph (3) or (4) of subsection
4 (b) if the Secretary previously and separately—

5 “(i) solicited public comment for
6 changing the management status of the
7 applicable National Forest System road or
8 trail—

9 “(I) to close the road or trail to
10 access; and

11 “(II) to minimize impacts to nat-
12 ural resources; and

13 “(ii) changed the management status
14 as described in clause (i).

15 “(B) REQUIREMENT.—Each project car-
16 ried out under the Program shall be on a Na-
17 tional Forest System road or trail, except with
18 respect to—

19 “(i) a project described in subsection
20 (b)(2); or

21 “(ii) a project carried out on a water-
22 shed for which the Secretary has entered
23 into a cooperative agreement under section
24 323 of the Department of the Interior and

1 Related Agencies Appropriations Act, 1999
2 (16 U.S.C. 1011a).

3 “(2) ANNUAL SELECTION OF PROJECTS FOR
4 FUNDING.—The Secretary shall—

5 “(A) establish a process for annually se-
6 lecting projects for funding under the Program,
7 consistent with the requirements of this section;

8 “(B) solicit and consider public input re-
9 gionally in the ranking of projects for funding
10 under the Program;

11 “(C) give priority for funding under the
12 Program to projects that would—

13 “(i) protect or improve water quality
14 in public drinking water source areas;

15 “(ii) restore the habitat of a threat-
16 ened, endangered, or sensitive fish or wild-
17 life species; or

18 “(iii) maintain future access to the
19 adjacent area for the public, contractors,
20 permittees, or firefighters; and

21 “(D) publish on the website of the Forest
22 Service—

23 “(i) the selection process established
24 under subparagraph (A); and

1 “(ii) a list that includes a description
2 and the proposed outcome of each project
3 funded under the Program in each fiscal
4 year.

5 “(d) IMPLEMENTATION.—In implementing the Pro-
6 gram, the Secretary shall ensure that the system of roads
7 and trails on the applicable unit of the National Forest
8 System—

9 “(1) is adequate to meet any increasing de-
10 demands for timber, recreation, and other uses;

11 “(2) provides for intensive use, protection, de-
12 velopment, and management of the land under prin-
13 ciples of multiple use and sustained yield of products
14 and services;

15 “(3) does not damage, degrade, or impair adja-
16 cent resources, including aquatic and wildlife re-
17 sources, to the extent practicable; and

18 “(4) reflects long-term funding expectations.

19 “(e) AUTHORIZATION OF APPROPRIATIONS.—There
20 is authorized to be appropriated to carry out this section
21 \$100,000,000 for each fiscal year.

22 “(f) APPROPRIATIONS.—In addition to amounts oth-
23 erwise made available, there is appropriated to the Sec-
24 retary to carry out this section, out of any amounts in

1 the Treasury not otherwise appropriated, \$50,000,000 for
2 each of fiscal years 2022 through 2026.”.

3 **SEC. 8002. STUDY AND REPORT ON FEASIBILITY OF RE-**
4 **VEGETATING RECLAIMED MINE SITES.**

5 (a) IN GENERAL.—Not later than 1 year after the
6 date of enactment of this Act, the Secretary of the Inte-
7 rior, acting through the Director of the Office of Surface
8 Mining Reclamation and Enforcement, shall conduct, and
9 submit to Congress a report describing the results of, a
10 study on the feasibility of revegetating reclaimed mined
11 sites.

12 (b) INCLUSIONS.—The report submitted under sub-
13 section (a) shall include—

14 (1) recommendations for how a program could
15 be implemented through the Office of Surface Min-
16 ing Reclamation and Enforcement to revegetate re-
17 claimed mined sites;

18 (2) identifications of reclaimed mine sites that
19 would be suitable for inclusion in such a program,
20 including sites on land that—

21 (A) is subject to title IV of the Surface
22 Mining Control and Reclamation Act of 1977
23 (30 U.S.C. 1231 et seq.); and

24 (B) is not subject to that title;

1 (3) a description of any barriers to implementa-
2 tion of such a program, including whether the pro-
3 gram would potentially interfere with the authorities
4 contained in, or the implementation of, the Surface
5 Mining Control and Reclamation Act of 1977 (30
6 U.S.C. 1201 et seq.), including the Abandoned Mine
7 Reclamation Fund created by section 401 of that
8 Act (30 U.S.C. 1231) and State reclamation pro-
9 grams under section 405 of that Act (30 U.S.C.
10 1235); and

11 (4) a description of the potential for job cre-
12 ation and workforce needs if such a program was
13 implemented.

14 **SEC. 8003. WILDFIRE RISK REDUCTION.**

15 (a) APPROPRIATIONS.—In addition to amounts other-
16 wise made available, there is appropriated to the Secretary
17 of the Interior and the Secretary of Agriculture, acting
18 through the Chief of the Forest Service, for the activities
19 described in subsection (c), out of any amounts in the
20 Treasury not otherwise appropriated, \$3,500,000,000.

21 (b) TREATMENT.—Of the 46,820,000 acres of Fed-
22 eral land or land held in trust for an Indian Tribe that
23 have been identified as having a very high wildfire hazard
24 potential, the Secretary of the Interior and the Secretary
25 of Agriculture, acting through the Chief of the Forest

1 Service, shall, by not later than September 30, 2027, con-
2 duct restoration treatments and change the Fire Regime
3 Condition Class of 10,000,000 acres that are located in—

4 (1) the wildland-urban interface; or

5 (2) a public drinking water source area.

6 (c) ACTIVITIES.—The amounts made available under
7 subsection (a) shall be expended in the following amounts
8 and for the following activities:

9 (1) \$100,000,000 for entering into an agree-
10 ment with the Director of the National Weather
11 Service to establish and operate a program that
12 makes use of the Geostationary Operational Envi-
13 ronmental Satellite Program to rapidly detect and
14 report wildfire starts in all areas in which the Sec-
15 retary of the Interior or the Secretary of Agriculture
16 has financial responsibility for wildland fire protec-
17 tion and prevention, of which—

18 (A) the Secretary of the Interior may ex-
19 pend \$50,000,000; and

20 (B) the Secretary of Agriculture may ex-
21 pend \$50,000,000.

22 (2) \$600,000,000 for the salaries and expenses
23 of Federal wildland firefighters in accordance with
24 subsection (d), of which—

1 (A) the Secretary of the Interior may ex-
2 pend \$120,000,000; and

3 (B) the Secretary of Agriculture may ex-
4 pend \$480,000,000.

5 (3) \$20,000,000 for the Secretary of the Inte-
6 rior to acquire technology and infrastructure for
7 each Type I and Type II incident management team
8 to maintain interoperability with respect to the radio
9 frequencies used by any responding agency.

10 (4) \$30,000,000 for the Secretary of Agri-
11 culture to provide financial assistance to States and
12 units of local government to establish and operate
13 Reverse-911 telecommunication systems.

14 (5) \$100,000,000 for the Secretary of the Inte-
15 rior to establish and implement a pilot program to
16 provide to local governments financial assistance for
17 the acquisition of slip-on tanker units to establish
18 fleets of vehicles that can be quickly converted to be
19 operated as fire engines.

20 (6) \$2,000,000 for the Secretary of Agriculture
21 to develop and publish, not later than 180 days after
22 the date of enactment of this Act, and every 5 years
23 thereafter, a map depicting at-risk communities (as
24 defined in section 101 of the Healthy Forests Res-

1 toration Act of 2003 (16 U.S.C. 6511)), including
2 Tribal at-risk communities.

3 (7) \$100,000,000 for pre-planning fire response
4 workshops that develop Potential Operational Delin-
5 eations and select potential control locations, of
6 which—

7 (A) the Secretary of the Interior may ex-
8 pend \$50,000,000; and

9 (B) the Secretary of Agriculture may ex-
10 pend \$50,000,000.

11 (8) \$20,000,000 for the Secretary of Agri-
12 culture to enter into an agreement with a Southwest
13 Ecological Restoration Institute established under
14 the Southwest Forest Health and Wildfire Preven-
15 tion Act of 2004 (16 U.S.C. 6701 et seq.)—

16 (A) to map each hazardous fuel reduction
17 or wildfire prevention treatment undertaken by
18 the Secretary of the Interior or the Secretary of
19 Agriculture;

20 (B) to map each wildfire that occurs in the
21 United States; and

22 (C) to publish a report every 5 years show-
23 ing the extent to which treatments described in
24 subparagraph (A) and previous wildfires affect
25 the boundaries of wildfires, categorized by—

- 1 (i) Federal land management agency;
2 (ii) region of the United States; and
3 (iii) treatment method.

4 (9) \$20,000,000 for research conducted under
5 the Joint Fire Science Program, of which—

6 (A) the Secretary of the Interior may ex-
7 pend \$10,000,000; and

8 (B) the Secretary of Agriculture may ex-
9 pend \$10,000,000.

10 (10) \$100,000,000 for the Secretary of Agri-
11 culture to implement the Collaborative Forest Land-
12 scape Restoration Program established under section
13 4003 of the Omnibus Public Land Management Act
14 of 2009 (16 U.S.C. 7303) in accordance with sub-
15 section (e).

16 (11) \$500,000,000 for conducting mechanical
17 thinning and timber harvesting in an ecologically ap-
18 propriate manner that focuses, to the extent prac-
19 ticable, on small-diameter trees, of which—

20 (A) the Secretary of the Interior may ex-
21 pend \$100,000,000; and

22 (B) the Secretary of Agriculture may ex-
23 pend \$400,000,000.

24 (12) \$500,000,000 for the Secretary of Agri-
25 culture to award community wildfire defense grants

1 to at-risk communities in accordance with subsection
2 (f).

3 (13) \$500,000,000 for implementing prescribed
4 fires and related activities, of which—

5 (A) the Secretary of the Interior may ex-
6 pend \$250,000,000; and

7 (B) the Secretary of Agriculture may ex-
8 pend \$250,000,000.

9 (14) \$500,000,000 for developing or improving
10 potential control locations, in accordance with para-
11 graph (7), including installing fuelbreaks, with a
12 focus on shaded fuelbreaks when ecologically appro-
13 priate, of which—

14 (A) the Secretary of the Interior may ex-
15 pend \$250,000,000; and

16 (B) the Secretary of Agriculture may ex-
17 pend \$250,000,000.

18 (15) \$200,000,000 for contracting or employing
19 crews of laborers to modify and remove flammable
20 vegetation on Federal land and use the resulting
21 materials, to the extent practicable, to produce
22 biochar, including through the use of the Civilian
23 Climate Corps established pursuant to Executive
24 Order 14008 (86 Fed. Reg. 7619 (February 1,

1 2021); relating to tackling the climate crisis at home
2 and abroad), 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 \$100,000,000.

7 (16) \$200,000,000 for post-fire restoration ac-
8 tivities that are implemented not later than 3 years
9 after the date that a wildland fire is contained, of
10 which—

11 (A) the Secretary of the Interior may ex-
12 pend \$100,000,000; and

13 (B) the Secretary of Agriculture may ex-
14 pend \$100,000,000.

15 (17) \$8,000,000 for the Secretary of Agri-
16 culture—

17 (A) to provide feedstock to firewood banks;
18 and

19 (B) to provide financial assistance for the
20 operation of firewood banks.

21 (d) WILDLAND FIREFIGHTERS.—

22 (1) IN GENERAL.—Using the amounts made
23 available under subsection (c)(2), not later than 180
24 days after the date of enactment of this Act, the
25 Secretary of the Interior and the Secretary of Agri-

1 culture shall coordinate with the Director of the Of-
2 fice of Personnel Management to develop a distinct
3 “wildland fire manager” occupational series.

4 (2) HAZARDOUS DUTY DIFFERENTIAL NOT AF-
5 FECTED.—Section 5545(d)(1) of title 5, United
6 States Code, is amended by striking “except” and all
7 that follows through “and” at the end and inserting
8 the following: “except—

9 “(A) an employee in an occupational series
10 covering positions for which the primary duties
11 involve the prevention, control, suppression, or
12 management of wildland fires, as determined by
13 the Office; and

14 “(B) in such other circumstances as the
15 Office may by regulation prescribe; and”.

16 (3) CURRENT EMPLOYEES.—Any individual em-
17 ployed as a wildland firefighter on the date on which
18 the occupational series established under paragraph
19 (1) takes effect may elect—

20 (A) to remain in the occupational series in
21 which the individual is employed; or

22 (B) to be included in the “wildland fire
23 manager” occupational series established under
24 that paragraph.

1 (4) PERMANENT EMPLOYEES; INCREASE IN
2 SALARY.—Beginning October 1, 2021, the Secretary
3 of the Interior and the Secretary of Agriculture
4 shall—

5 (A) seek to convert not fewer than 1,000
6 seasonal wildland firefighters to wildland fire
7 managers that—

8 (i) are full-time, permanent, year-
9 round Federal employees; and

10 (ii) reduce hazardous fuels on Federal
11 land not fewer than 800 hours per year;
12 and

13 (B) increase the base salary of a Federal
14 wildland firefighter or wildland fire manager by
15 an amount that is commensurate with an in-
16 crease of \$20,000 per year, if—

17 (i) the hourly pay of the Federal em-
18 ployee is lower than the minimum wage of
19 the applicable State; or

20 (ii) the position is located in a loca-
21 tion where it is difficult to recruit or to re-
22 tain a wildland firefighter or wildland fire
23 manager.

24 (e) COLLABORATIVE FOREST LANDSCAPE RESTORA-
25 TION PROGRAM.—Using the amounts made available

1 under subsection (c)(10), not later than 180 days after
2 the date of enactment of this Act, the Secretary of Agri-
3 culture shall—

4 (1) solicit new project proposals under the Col-
5 laborative Forest Landscape Restoration Program
6 established under section 4003 of the Omnibus Pub-
7 lic Land Management Act of 2009 (16 U.S.C. 7303)
8 (referred to in this subsection as the “Program”);

9 (2) discontinue the funding of any proposal se-
10 lected for funding under the Program prior to Sep-
11 tember 30, 2018;

12 (3) select project proposals for funding under
13 the Program in a manner that—

14 (A) gives priority to a project proposal
15 that—

16 (i) will treat the most acres described
17 in subsection (b); and

18 (ii) contains the lowest cost per acre
19 to be treated;

20 (B) gives priority to a project proposal
21 that is proposed by a collaborative that has suc-
22 cessfully accomplished treatments, as proposed
23 in an earlier proposal funded under the Pro-
24 gram; and

1 (C) discontinues funding for a project that
2 fails to achieve the results included in a project
3 proposal submitted under paragraph (1) for
4 more than 2 consecutive years; and

5 (4) allow funding to be used to cover necessary
6 planning costs for projects included in project pro-
7 posals selected for funding under the Program.

8 (f) COMMUNITY WILDFIRE DEFENSE GRANT PRO-
9 GRAM.—

10 (1) ESTABLISHMENT.—Using the amounts
11 made available under subsection (c)(12), not later
12 than 180 days after the date of enactment of this
13 Act, the Secretary of Agriculture shall establish a
14 program, which shall be separate from the program
15 established under section 203 of the Robert T. Staf-
16 ford Disaster Relief and Emergency Assistance Act
17 (42 U.S.C. 5133), under which the Secretary of Ag-
18 riculture shall award grants to at-risk communities,
19 including Indian Tribes—

20 (A) to develop or revise a community wild-
21 fire protection plan; and

22 (B) to carry out projects described in a
23 community wildfire protection plan that is not
24 more than 10 years old.

1 (2) PRIORITY.—In awarding grants under the
2 program described in paragraph (1), the Secretary
3 of Agriculture shall give priority to an at-risk com-
4 munity that is—

5 (A) in an area identified by the Secretary
6 of Agriculture as having high or very high wild-
7 fire hazard potential;

8 (B) a low-income community; or

9 (C) a community impacted by a severe dis-
10 aster.

11 (3) COMMUNITY WILDFIRE DEFENSE
12 GRANTS.—

13 (A) GRANT AMOUNTS.—A grant—

14 (i) awarded under paragraph (1)(A)
15 shall be for not more than \$250,000; and

16 (ii) awarded under paragraph (1)(B)
17 shall be for not more than \$10,000,000.

18 (B) COST-SHARING REQUIREMENT.—The
19 non-Federal share of the cost (including the ad-
20 ministrative cost) of carrying out a project
21 using funds from a grant awarded under the
22 program described in paragraph (1) shall be—

23 (i) not less than 10 percent for a
24 grant awarded under paragraph (1)(A);
25 and

1 (ii) not less than 25 percent for a
2 grant awarded under paragraph (1)(B).

3 (g) FUNDING LIMITATIONS.—Section 10 of the Coop-
4 erative Forestry Assistance Act of 1978 (16 U.S.C. 2106)
5 is amended—

6 (1) in subsection (b)(3), by striking “rural
7 areas.” and all that follows through the end of the
8 paragraph and inserting “any city, town, or unincor-
9 porated area that has a population of not more than
10 10,000 inhabitants; and”;

11 (2) by redesignating subsections (e) through (g)
12 as subsections (d) thorough (h), respectively; and

13 (3) by inserting after subsection (b) the fol-
14 lowing:

15 “(c) ELIGIBILITY.—

16 “(1) IN GENERAL.—Notwithstanding the re-
17 quirements of section 2A, to be eligible for financial,
18 technical, or related assistance under any of para-
19 graphs (2) through (4) of subsection (b), a State
20 shall seek to improve the submission by the State of
21 fire data and information to the National Fire Inci-
22 dent Reporting System pursuant to section 9 of the
23 Federal Fire Prevention and Control Act of 1974
24 (15 U.S.C. 2208).

1 “(2) ROOFING REQUIREMENTS.—Notwith-
2 standing the requirements of section 2A, the Sec-
3 retary, a State Forester, or an equivalent State offi-
4 cial shall not disburse funds from the National Fire
5 Capacity account or the Rural Fire Capacity account
6 to an area or volunteer fire department that is lo-
7 cated in a county or community that has not adopt-
8 ed an ordinance or regulation that requires the con-
9 struction of new roofs on buildings to adhere to
10 standards that are similar to, or more stringent
11 than—

12 “(A) the roof construction standards estab-
13 lished by the National Fire Protection Associa-
14 tion; or

15 “(B) an applicable model building code es-
16 tablished by the International Code Council.

17 “(3) ASSISTANCE FOR RURAL COMMUNITIES.—

18 “(A) IN GENERAL.—The Secretary, a
19 State Forester, or an equivalent State official
20 shall only use funds in the Rural Fire Capacity
21 account to assist in providing apparatus to
22 rural communities with populations of not more
23 than 10,000 inhabitants.

1 “(B) FUNDING.—The Secretary may im-
2 plement this paragraph through the use of
3 funds from the Rural Fire Capacity account.”.

4 (h) EXPIRATION OF FUNDING.—Any funding made
5 available under this section that is not obligated by the
6 Secretary of the Interior or the Secretary of Agriculture
7 on the date that is 5 years after the date of enactment
8 of this Act shall be returned to the general fund of the
9 Treasury.

10 **SEC. 8004. ECOSYSTEM RESTORATION.**

11 (a) APPROPRIATIONS.—In addition to amounts other-
12 wise made available, there is appropriated to the Secretary
13 of the Interior and the Secretary of Agriculture, acting
14 through the Chief of the Forest Service, for the activities
15 described in subsection (b), out of any amounts in the
16 Treasury not otherwise appropriated, \$2,000,000,000.

17 (b) ACTIVITIES.—The amounts made available under
18 subsection (a) shall be expended in the following amounts
19 and for the following activities:

20 (1) \$200,000,000 for entering into contracts,
21 including stewardship contracts or agreements, each
22 of which is to restore the ecological health on not
23 fewer than 25,000 acres of Federal land, of which—

24 (A) the Secretary of the Interior may ex-
25 pend \$100,000,000; and

1 (B) the Secretary of Agriculture may ex-
2 pend \$100,000,000.

3 (2) \$200,000,000 to provide to States for im-
4 plementing restoration projects on Federal land pur-
5 suant to good neighbor agreements entered into
6 under section 8206 of the Agricultural Act of 2014
7 (16 U.S.C. 2113a), of which—

8 (A) the Secretary of the Interior may ex-
9 pend \$100,000,000; and

10 (B) the Secretary of Agriculture may ex-
11 pend \$100,000,000.

12 (3) \$500,000,000 for the Secretary of Agri-
13 culture to provide financial assistance to facilities
14 that purchase and process byproducts from eco-
15 system restoration projects in accordance with sub-
16 section (c).

17 (4) \$400,000,000 for the Secretary of the Inte-
18 rior to provide to States for implementing voluntary
19 ecosystem restoration projects, including stream res-
20 toration projects and pinyon-juniper removal
21 projects, on private or public land, using a distribu-
22 tion formula to be determined by the Secretary of
23 the Interior, in consultation with the Secretary of
24 Agriculture, that requires matching funding from a

1 State to be eligible to receive funding under this
2 paragraph.

3 (5) \$100,000,000 for the Secretary of Agri-
4 culture to award grants to States to establish rental
5 programs for portable skidder bridges to minimize
6 stream bed disturbance on non-Federal land and
7 Federal land.

8 (6) \$200,000,000 for invasive species detection,
9 prevention, and eradication, including conducting re-
10 search and providing resources to facilitate detection
11 of invasive species at points of entry and awarding
12 grants for eradication of invasive species on non-
13 Federal land and on Federal land, 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 (7) \$100,000,000 to restore, prepare, or adapt
19 recreation sites on Federal land that have experi-
20 enced or may likely experience visitation and use be-
21 yond the current carrying capacity of the sites, of
22 which—

23 (A) the Secretary of the Interior may ex-
24 pend \$50,000,000; and

1 (B) the Secretary of Agriculture may ex-
2 pend \$50,000,000.

3 (8) \$200,000,000 to restore native vegetation
4 and mitigate environmental hazards on mined land
5 on Federal and non-Federal land, of which—

6 (A) the Secretary of the Interior may ex-
7 pend \$100,000,000; and

8 (B) the Secretary of Agriculture may ex-
9 pend \$100,000,000.

10 (9) \$100,000,000 for the Secretary of Agri-
11 culture, in coordination with the Secretary of the In-
12 terior, to establish a collaborative-based, landscape-
13 scale restoration program to restore water quality or
14 fish passage on Federal land in accordance with sub-
15 section (d).

16 (c) SAWMILL INFRASTRUCTURE.—The Secretary of
17 Agriculture, in coordination with the Secretary of the Inte-
18 rior, shall—

19 (1) develop a ranking system that categorizes
20 units of Federal land as being—

21 (A) very low priority for ecological restora-
22 tion involving vegetation removal;

23 (B) low priority for ecological restoration
24 involving vegetation removal;

1 (C) medium priority for ecological restora-
2 tion involving vegetation removal;

3 (D) high priority for ecological restoration
4 involving vegetation removal; or

5 (E) very high priority for ecological res-
6 toration involving vegetation removal;

7 (2) determine, for a unit identified under para-
8 graph (1) as being high or very high priority for eco-
9 logical restoration involving vegetation removal, if—

10 (A) a sawmill or other wood-processing fa-
11 cility exists in close proximity to the unit; and

12 (B) the presence of a sawmill or other
13 wood-processing facility would substantially de-
14 crease or does substantially decrease the cost of
15 conducting ecological restoration projects in-
16 volving vegetation removal;

17 (3) in accordance with any conditions the Sec-
18 retary of Agriculture determines to be necessary,
19 provide financial assistance, including a low-interest
20 loan or a loan guarantee, to an entity seeking to es-
21 tablish or improve a sawmill or other wood-proc-
22 essing facility in close proximity to a unit of Federal
23 land that has been identified under paragraph (1) as
24 high or very high priority for ecological restoration,
25 if the presence of a sawmill or other wood-processing

1 facility would substantially decrease or does substan-
2 tially decrease the cost of conducting ecological res-
3 toration projects involving vegetation removal on the
4 unit of Federal land, as determined under paragraph
5 (2)(B); and

6 (4) to the extent practicable, when allocating
7 funding to units of Federal land for ecological res-
8 toration projects involving vegetation removal, give
9 priority to a unit of Federal land that—

10 (A) has been identified under paragraph
11 (1) as being high or very high priority for eco-
12 logical restoration involving vegetation removal;
13 and

14 (B) has a sawmill or other wood-processing
15 facility—

16 (i) that, as determined under para-
17 graph (2)—

18 (I) exists in close proximity to
19 the unit; and

20 (II) does substantially decrease
21 the cost of conducting ecological res-
22 toration projects involving vegetation
23 removal on the unit; or

24 (ii) that has received financial assist-
25 ance under paragraph (3).

1 (d) COLLABORATIVE-BASED, AQUATIC-FOCUSED,
2 LANDSCAPE-SCALE RESTORATION PROGRAM.—Using the
3 amounts made available under subsection (b)(9), not later
4 than 180 days after the date of enactment of this Act,
5 the Secretary of Agriculture shall—

6 (1) solicit collaboratively developed proposals
7 that—

8 (A) are for 5-year projects to restore fish
9 passage or water quality on Federal land, in-
10 cluding land held in trust for an Indian Tribe;

11 (B) contain proposed accomplishments and
12 proposed non-Federal funding; and

13 (C) request not more than \$5,000,000 in
14 funding made available under subsection (b)(9);
15 and

16 (2) select project proposals for funding in a
17 manner that—

18 (A) gives priority to a project proposal that
19 would result in the most miles of streams being
20 restored for the lowest amount of Federal fund-
21 ing; and

22 (B) discontinues funding for a project that
23 fails to achieve the results included in a pro-
24 posal submitted under paragraph (1) for more
25 than 2 consecutive years.

1 (e) REPORT.—The Secretary of Agriculture shall
2 publish a list of—

3 (1) all of the priority watersheds on National
4 Forest System land;

5 (2) the condition of each priority watershed on
6 the date of enactment of this Act; and

7 (3) the condition of each priority watershed on
8 the date that is 5 years after the date of enactment
9 of this Act.

10 (f) 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 **TITLE IX—WESTERN WATER**
17 **INFRASTRUCTURE**

18 **SEC. 9001. WESTERN WATER INFRASTRUCTURE.**

19 (a) DEFINITIONS.—In this section:

20 (1) ELIGIBLE PROGRAM OR PROJECT.—The
21 term “eligible program or project” means—

22 (A) a water storage project authorized by
23 an Act of Congress;

24 (B) a regional rural water project author-
25 ized by an Act of Congress;

1 (C) a WaterSMART drought resiliency
2 project, water or energy efficiency grant, or co-
3 operative watershed management grant;

4 (D) a water recycling and reuse project au-
5 thorized under the Reclamation Wastewater
6 and Groundwater Study and Facilities Act (43
7 U.S.C. 390h et seq.); and

8 (E) a water desalination project.

9 (2) SECRETARY.—The term “Secretary” means
10 the Secretary of the Interior.

11 (b) APPROPRIATION.—In addition to amounts other-
12 wise made available, there is appropriated to the Sec-
13 retary, out of any amounts in the Treasury not otherwise
14 appropriated, \$5,000,000,000 for the period of fiscal years
15 2022 through 2026, to be allocated among eligible pro-
16 grams and projects, as determined by the Secretary, con-
17 sistent with the cost share and authorization requirements
18 of the applicable eligible program or project.

19 **TITLE X—ENERGY ACT OF 2020**
20 **FUNDING**

21 **SEC. 10001. ENERGY STORAGE DEMONSTRATION**
22 **PROJECTS.**

23 (a) ENERGY STORAGE DEMONSTRATION PROJECTS;
24 PILOT GRANT PROGRAM.—In addition to amounts other-
25 wise made available, there is appropriated to the Secretary

1 to carry out activities under section 3201(e) of the Energy
2 Act of 2020 (42 U.S.C. 17232(e)), out of any amounts
3 in the Treasury not otherwise appropriated, \$71,000,000
4 for each of fiscal years 2021 through 2025.

5 (b) LONG-DURATION DEMONSTRATION INITIATIVE
6 AND JOINT PROGRAM.—In addition to amounts otherwise
7 made available, there is appropriated to the Secretary to
8 carry out activities under section 3201(d) of the Energy
9 Act of 2020 (42 U.S.C. 17232(d)), out of any amounts
10 in the Treasury not otherwise appropriated, \$30,000,000
11 for each of fiscal years 2021 through 2025.

12 **SEC. 10002. ADVANCED REACTOR DEMONSTRATION PRO-**
13 **GRAM.**

14 In addition to amounts otherwise made available,
15 there are appropriated to the Secretary to carry out activi-
16 ties under section 959A of the Energy Policy Act of 2005
17 (42 U.S.C. 16279a), out of any amounts in the Treasury
18 not otherwise appropriated—

- 19 (1) \$155,000,000 for fiscal year 2021;
- 20 (2) \$405,000,000 for fiscal year 2022;
- 21 (3) \$420,000,000 for fiscal year 2023;
- 22 (4) \$455,000,000 for fiscal year 2024; and
- 23 (5) \$455,000,000 for fiscal year 2025.

1 **SEC. 10003. MINERAL SECURITY PROJECTS.**

2 (a) NATIONAL GEOLOGICAL AND GEOPHYSICAL
3 DATA PRESERVATION PROGRAM.—In addition to amounts
4 otherwise made available, there is appropriated to the Sec-
5 retary of the Interior to carry out activities under section
6 351 of the Energy Policy Act of 2005 (42 U.S.C. 15908),
7 out of any amounts in the Treasury not otherwise appro-
8 priated—

9 (1) \$3,668,000 for fiscal year 2021; and

10 (2) \$5,000,000 for each of fiscal years 2022
11 through 2025.

12 (b) RARE EARTH MINERAL SECURITY.—In addition
13 to amounts otherwise made available, there is appro-
14 priated to the Secretary to carry out activities under sec-
15 tion 7001(a) of the Energy Act of 2020 (42 U.S.C.
16 13344(a)), out of any amounts in the Treasury not other-
17 wise appropriated, \$23,000,000 for each of fiscal years
18 2021 through 2025.

19 (c) CRITICAL MATERIAL INNOVATION, EFFICIENCY,
20 AND ALTERNATIVES.—In addition to amounts otherwise
21 made available, there is appropriated to the Secretary to
22 carry out activities under section 7002(g) of the Energy
23 Act of 2020 (30 U.S.C. 1606(g)), out of any amounts in
24 the Treasury not otherwise appropriated—

25 (1) \$125,000,000 for fiscal year 2021;

26 (2) \$105,000,000 for fiscal year 2022;

1 (3) \$100,000,000 for fiscal year 2023; and

2 (4) \$135,000,000 for each of fiscal years 2024

3 and 2025.

4 (d) CRITICAL MATERIAL SUPPLY CHAIN RESEARCH

5 FACILITY.—In addition to amounts otherwise made avail-

6 able, there is appropriated to the Secretary to carry out

7 activities under section 7002(h) of the Energy Act of 2020

8 (30 U.S.C. 1606(h)), out of any amounts in the Treasury

9 not otherwise appropriated—

10 (1) \$10,000,000 for fiscal year 2021;

11 (2) \$30,000,000 for fiscal year 2022; and

12 (3) \$35,000,000 for fiscal year 2023.

13 **SEC. 10004. CARBON CAPTURE DEMONSTRATION AND**

14 **PILOT PROGRAMS.**

15 (a) CARBON CAPTURE LARGE-SCALE PILOT

16 PROJECTS.—In addition to amounts otherwise made avail-

17 able, there are appropriated to the Secretary to carry out

18 activities under section 962(b)(2)(B) of the Energy Policy

19 Act of 2005 (42 U.S.C. 16292(b)(2)(B)), out of any

20 amounts in the Treasury not otherwise appropriated—

21 (1) \$162,000,000 for fiscal year 2021;

22 (2) \$225,000,000 for fiscal year 2022;

23 (3) \$200,000,000 for fiscal year 2023;

24 (4) \$200,000,000 for fiscal year 2024; and

25 (5) \$150,000,000 for fiscal year 2025.

1 (b) CARBON CAPTURE DEMONSTRATION PROJECTS
2 PROGRAM.—In addition to amounts otherwise made avail-
3 able, there are appropriated to the Secretary to carry out
4 activities under section 962(b)(2)(C) of the Energy Policy
5 Act of 2005 (42 U.S.C. 16292(b)(2)(C)), out of any
6 amounts in the Treasury not otherwise appropriated—

7 (1) \$437,000,000 for fiscal year 2021;

8 (2) \$500,000,000 for each of fiscal years 2022
9 through 2024; and

10 (3) \$600,000,000 for fiscal year 2025.

11 **SEC. 10005. DIRECT AIR CAPTURE TECHNOLOGIES PRIZE**
12 **COMPETITIONS.**

13 (a) PRECOMMERCIAL.—In addition to amounts other-
14 wise made available, there is appropriated to the Secretary
15 to carry out activities under section 969D(e)(2)(A) of the
16 Energy Policy Act of 2005 (42 U.S.C. 16298d(e)(2)(A)),
17 out of any amounts in the Treasury not otherwise appro-
18 priated, \$15,000,000 for fiscal year 2021

19 (b) COMMERCIAL.—In addition to amounts otherwise
20 made available, there is appropriated to the Secretary to
21 carry out activities under section 969D(e)(2)(B) of the
22 Energy Policy Act of 2005 (42 U.S.C. 16298d(e)(2)(B)),
23 out of any amounts in the Treasury not otherwise appro-
24 priated, \$100,000,000 for fiscal year 2021.

1 **SEC. 10006. WATER POWER PROJECTS.**

2 (a) HYDROPOWER AND MARINE ENERGY.—In addi-
3 tion to amounts otherwise made available, there are appro-
4 priated to the Secretary, out of any amounts in the Treas-
5 ury not otherwise appropriated—

6 (1) to carry out activities under section 634 of
7 the Energy Independence and Security Act of 2007
8 (42 U.S.C. 17213), \$36,000,000 for the period of
9 fiscal years 2021 through 2025; and

10 (2) to carry out activities under section 635 of
11 the Energy Independence and Security Act of 2007
12 (42 U.S.C. 17214), \$70,400,000 for the period of
13 fiscal years 2021 through 2025.

14 (b) NATIONAL MARINE ENERGY CENTERS.—In addi-
15 tion to amounts otherwise made available, there is appro-
16 priated to the Secretary to carry out activities under sec-
17 tion 636 of the Energy Independence and Security Act
18 of 2007 (42 U.S.C. 17215), out of any amounts in the
19 Treasury not otherwise appropriated, \$10,000,000 for
20 each of fiscal years 2022 through 2025.

21 (c) HYDROELECTRIC INCENTIVES.—In addition to
22 amounts otherwise made available, there is appropriated
23 to the Secretary to carry out activities under sections 242
24 and 243 of the Energy Policy Act of 2005 (42 U.S.C.
25 15881, 15882), out of any amounts in the Treasury not

1 otherwise appropriated, \$100,000,000 for the period of
2 fiscal years 2021 through 2025.

3 **SEC. 10007. RENEWABLE ENERGY PROJECTS.**

4 (a) GEOTHERMAL ENERGY.—In addition to amounts
5 otherwise made available, there is appropriated to the Sec-
6 retary to carry out activities under section 615 of the En-
7 ergy Independence and Security Act of 2007 (42 U.S.C.
8 17194), out of any amounts in the Treasury not otherwise
9 appropriated, \$84,000,000 for the period of fiscal years
10 2022 through 2025.

11 (b) WIND ENERGY.—In addition to amounts other-
12 wise made available, there are appropriated to the Sec-
13 retary, out of any amounts in the Treasury not otherwise
14 appropriated—

15 (1) to carry out activities under section
16 3003(b)(2) of the Energy Act of 2020 (42 U.S.C.
17 16237(b)(2)), \$60,000,000 for the period of fiscal
18 years 2022 through 2025; and

19 (2) to carry out activities under section
20 3003(b)(4) of the Energy Act of 2020 (42 U.S.C.
21 16237(b)(4)), \$40,000,000 for the period of fiscal
22 years 2022 through 2025.

23 (c) SOLAR ENERGY.—In addition to amounts other-
24 wise made available, there are appropriated to the Sec-

1 retary, out of any amounts in the Treasury not otherwise
2 appropriated—

3 (1) to carry out activities under section
4 3004(b)(2) of the Energy Act of 2020 (42 U.S.C.
5 16238(b)(2)), \$40,000,000 for the period of fiscal
6 years 2022 through 2025;

7 (2) to carry out activities under section
8 3004(b)(3) of the Energy Act of 2020 (42 U.S.C.
9 16238(b)(3)), \$20,000,000 for the period of fiscal
10 years 2022 through 2025; and

11 (3) to carry out activities under section
12 3004(b)(4) of the Energy Act of 2020 (42 U.S.C.
13 16238(b)(4)), \$20,000,000 for the period of fiscal
14 years 2022 through 2025.

15 **SEC. 10008. INDUSTRIAL EMISSIONS DEMONSTRATION**
16 **PROJECTS.**

17 In addition to amounts otherwise made available,
18 there are appropriated to the Secretary to carry out activi-
19 ties under section 454(d)(3) of the Energy Independence
20 and Security Act of 2007 (42 U.S.C. 17113(d)(3)), out
21 of any amounts in the Treasury not otherwise appro-
22 priated—

23 (1) \$20,000,000 for fiscal year 2022;

24 (2) \$30,000,000 for fiscal year 2023; and

1 (3) \$50,000,000 for each of fiscal years 2024
2 and 2025.

3 **SEC. 10009. AVAILABILITY OF AMOUNTS.**

4 Amounts made available by this title for fiscal year
5 2021 shall remain available until expended.

6 **TITLE XI—WAGE RATE**
7 **REQUIREMENTS**

8 **SEC. 11001. WAGE RATE REQUIREMENTS.**

9 (a) DAVIS-BACON.—Any laborer or mechanic em-
10 ployed by any contractor or subcontractor in the perform-
11 ance of work on a project funded under this Act or an
12 amendment made by this Act shall be paid wages at rates
13 not less than those prevailing on similar projects in the
14 locality, as determined by the Secretary of Labor in ac-
15 cordance with subchapter IV of chapter 31 of title 40,
16 United States Code (commonly referred to as the “Davis-
17 Bacon Act”).

18 (b) AUTHORITY.—With respect to the labor stand-
19 ards specified in subsection (a), the Secretary of Labor
20 shall have the authority and functions set forth in Reorga-
21 nization Plan Numbered 14 of 1950 (64 Stat. 1267; 5
22 U.S.C. App.) and section 3145 of title 40, United States
23 Code.