

116TH CONGRESS  
2D SESSION

# H. R. 8273

To establish programs and authorities to facilitate the commercial application of clean energy and related technologies in the United States.

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## IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 16, 2020

Ms. JOHNSON of Texas introduced the following bill; which was referred to the Committee on Science, Space, and Technology

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## A BILL

To establish programs and authorities to facilitate the commercial application of clean energy and related technologies in the United States.

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 “Energizing Technology Transfer Act”.

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

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings.
- Sec. 3. Definitions.

TITLE I—NATIONAL CLEAN ENERGY TECHNOLOGY TRANSFER  
PROGRAMS

- Sec. 101. Regional clean energy innovation program.
- Sec. 102. National clean energy incubator program.
- Sec. 103. Clean energy technology university prize competition.
- Sec. 104. Clean energy technology transfer coordination.

TITLE II—SUPPORTING TECHNOLOGY DEVELOPMENT AT THE  
NATIONAL LABORATORIES

- Sec. 201. Lab partnering service pilot program.
- Sec. 202. Lab-Embedded Entrepreneurship Program.
- Sec. 203. Small business voucher program.
- Sec. 204. Entrepreneurial leave program.
- Sec. 205. National laboratory employee outside employment authority.
- Sec. 206. Technology commercialization fund.
- Sec. 207. Signature authority.

TITLE III—DEPARTMENT OF ENERGY MODERNIZATION

- Sec. 301. Technology Transfer Program.
- Sec. 302. Management of demonstration projects.
- Sec. 303. Streamlining prize competitions.
- Sec. 304. Milestone-based demonstration projects.
- Sec. 305. Cost-share waiver extension.
- Sec. 306. Special hiring authority for scientific, engineering, and project management personnel.
- Sec. 307. Technology transfer reports and evaluation.

**1 SEC. 2. FINDINGS.**

2 Congress finds the following:

3 (1) In order to achieve domestic and inter-  
4 national net-zero greenhouse gas emissions targets,  
5 a rapid and substantial investment in clean energy  
6 innovation is needed.

7 (2) Clean energy technologies face unique ob-  
8 stacles to successful commercial application, includ-  
9 ing high up-front capital costs, long development  
10 times, and the need to displace incumbent tech-  
11 nologies in highly regulated markets.

1           (3) Multiple technology development and fi-  
2           nancing gaps exist in the clean energy innovation  
3           and commercial application landscape that are not  
4           currently met by private sector investment alone.

5           (4) Federal investments in technology transfer  
6           and demonstration programs help fill existing gaps  
7           in the innovation cycle and improve the likelihood of  
8           successful and timely commercial application of  
9           clean energy technologies.

10          (5) To maximize clean energy innovation’s posi-  
11          tive impact on United States economic competitive-  
12          ness and reach net-zero greenhouse gas emissions,  
13          the Department of Energy must show significant  
14          leadership in enabling the transfer of new tech-  
15          nologies to the private sector, particularly through  
16          the Office of Technology Transitions.

17 **SEC. 3. DEFINITIONS.**

18          In this Act:

19           (1) **CLEAN ENERGY TECHNOLOGY.**—The term  
20           “clean energy technology” means a technology that  
21           significantly reduces energy use, increases energy ef-  
22           ficiency, reduces greenhouse gas emissions, reduces  
23           emissions of other pollutants, or mitigates other neg-  
24           ative environmental consequences.

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

3           (3) DIRECTOR.—The term “Director” means  
4 the Director of each National Laboratory and the  
5 Director of each Department of Energy single-pur-  
6 pose research facility.

7           (4) ECONOMICALLY DISTRESSED AREA.—The  
8 term “economically distressed area” has the mean-  
9 ing described in section 301(a) of the Public Works  
10 and Economic Development Act of 1965 (42 U.S.C.  
11 3161(a)).

12           (5) GRANT.—The term “grant” means a grant  
13 award, cooperative agreement award, or any other fi-  
14 nancial assistance arrangement that the Secretary of  
15 Energy determines to be appropriate.

16           (6) INSTITUTION OF HIGHER EDUCATION.—The  
17 term “institution of higher education” has the  
18 meaning given such term in the Higher Education  
19 Act of 1965, as amended (20 U.S.C. 1001).

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

24           (8) SECRETARY.—The term “Secretary” means  
25 the Secretary of Energy.

1 **TITLE I—NATIONAL CLEAN EN-**  
2 **ERGY TECHNOLOGY TRANS-**  
3 **FER PROGRAMS**

4 **SEC. 101. REGIONAL CLEAN ENERGY INNOVATION PRO-**  
5 **GRAM.**

6 (a) DEFINITIONS.—In this section:

7 (1) REGIONAL CLEAN ENERGY INNOVATION  
8 PARTNERSHIP.—The term “regional clean energy in-  
9 novation partnership” means a group of one or more  
10 persons, including a covered consortium, who per-  
11 form a collection of activities that are coordinated by  
12 such covered consortium to carry out the purposes  
13 of the program under subsection (c) in a region of  
14 the United States.

15 (2) COVERED CONSORTIUM.—The term “cov-  
16 ered consortium” means an individual or group of  
17 individuals in partnership with a government entity,  
18 including a State, local, or tribal government or unit  
19 of such government, and at least 2 or more of the  
20 following additional entities—

21 (A) an institution of higher education or  
22 higher education consortium;

23 (B) a workforce training provider, includ-  
24 ing vocational schools and community colleges;

25 (C) a private sector entity;

1 (D) a nonprofit organization;

2 (E) a community group;

3 (F) a labor group;

4 (G) a National Laboratory;

5 (H) a venture development organization;

6 (I) an organization focused on clean energy  
7 technology innovation or entrepreneurship;

8 (J) a business accelerator or incubator;

9 (K) a private sector entity or group of en-  
10 tities, including a trade or industry association;

11 (L) an economic development organization;

12 (M) a manufacturing facility or organiza-  
13 tion;

14 (N) a clean energy incubator or accel-  
15 erator; or

16 (O) any other entity that the Secretary de-  
17 termines to be relevant.

18 (3) PROGRAM.—The term “program” means  
19 the Regional Clean Energy Innovation Program au-  
20 thorized in subsection (b).

21 (4) FRONTLINE COMMUNITY.—The term  
22 “frontline community” means a community with sig-  
23 nificant representation of communities of color, low-  
24 income communities, or Tribal and indigenous com-  
25 munities, that experiences, or is at risk of experi-

1       encing higher or more adverse human health or envi-  
2       ronmental effects.

3       (b) IN GENERAL.—The Secretary shall establish a  
4       Regional Clean Energy Innovation Program, a research,  
5       development, demonstration, and commercial application  
6       program designed to accelerate the pace of innovation of  
7       clean energy technologies through the formation or sup-  
8       port of regional clean energy innovation partnerships  
9       that—

10           (1) are responsive to the energy resources,  
11       needs of industry, workforce, policy landscape, and  
12       clean energy innovation capabilities of the region of  
13       the country in which such partnership is located;

14           (2) enhance and accelerate clean energy innova-  
15       tion; and

16           (3) are located in diverse geographic regions of  
17       the United States, including United States terri-  
18       tories.

19       (c) PURPOSES OF THE PROGRAM.—The purposes of  
20       the program established under subsection (a) are to—

21           (1) improve the competitiveness of United  
22       States clean energy technology research, develop-  
23       ment, demonstration, and commercial application;  
24       and

1           (2) support the development of tools and tech-  
2           nologies best suited for use in low-income and front-  
3           line communities.

4           (d) REGIONAL CLEAN ENERGY INNOVATION PART-  
5           NERSHIPS.—

6           (1) IN GENERAL.—The Secretary shall competi-  
7           tively award grants to covered consortia to establish  
8           or support regional clean energy innovation partner-  
9           ships that achieve the purposes of the program in  
10          subsection (c).

11          (2) PERMISSIBLE ACTIVITIES.—Grants awarded  
12          under this subsection shall be used for activities de-  
13          termined appropriate by the Secretary to achieve the  
14          purposes of the program in subsection (c), includ-  
15          ing—

16                (A) facilitating the commercial application  
17                of clean energy products, processes, and serv-  
18                ices, including through research, development,  
19                demonstration, technology transfer, or support  
20                of clean energy companies;

21                (B) planning among participants of a re-  
22                gional clean energy innovation partnership to  
23                improve the strategic coordination of the part-  
24                nership;



1 (C) improving stakeholder involvement in  
2 the development of goals and activities of a re-  
3 gional clean energy innovation partnership;

4 (D) assessing different incentive mecha-  
5 nisms for clean energy development and com-  
6 mercial application in the region;

7 (E) hosting events and conferences; and

8 (F) establishing and updating roadmaps to  
9 measure progress on relevant goals, such as  
10 those relevant to metrics developed under sub-  
11 section (h).

12 (3) APPLICATIONS.—Each application sub-  
13 mitted to the Secretary under paragraph (1) may in-  
14 clude—

15 (A) a list of members and roles of mem-  
16 bers of the covered consortia, as well as any  
17 other stakeholders supporting the activities of  
18 the regional clean energy innovation partner-  
19 ship;

20 (B) a description of the proposed outcomes  
21 of the regional clean energy innovation partner-  
22 ship;

23 (C) an assessment of the relevant clean en-  
24 ergy innovation assets needed in a region to  
25 achieve proposed outcomes, such as education

1 and training programs, research facilities, infra-  
2 structure or site development, access to capital,  
3 manufacturing capabilities, or other assets;

4 (D) a description of proposed activities  
5 that the regional clean energy innovation part-  
6 nership plans to undertake and how the pro-  
7 posed activities will achieve the purposes de-  
8 scribed in subsection (c) and the proposed out-  
9 comes in subparagraph (B);

10 (E) a description of the geographical re-  
11 gion that will engage in the partnership;

12 (F) a plan for attracting additional funds  
13 and identification of funding sources from non-  
14 Federal sources to deliver the proposed out-  
15 comes of the regional clean energy innovation  
16 partnership; and

17 (G) a plan for sustaining activities of the  
18 regional clean energy innovation partnership  
19 after funds received under this program have  
20 been expended.

21 (4) CONSIDERATIONS.—In selecting covered  
22 consortia for funding under the program, the Sec-  
23 retary shall—

1 (A) give special consideration to applica-  
2 tions from entities located in an economically  
3 distressed area; and

4 (B) ensure that there is geographic diver-  
5 sity among the covered consortia selected to re-  
6 ceive funding.

7 (5) AWARD AMOUNT.—Grants given out under  
8 this Program shall be in an amount not greater than  
9 \$10,000,000, with the total grant award in any year  
10 less than that in the previous year.

11 (6) COST SHARE.—For grants that are dis-  
12 bursed over the course of three or more years, the  
13 Secretary shall require, as a condition of receipt of  
14 funds under this section, that a covered consortium  
15 provide not less than 50 percent of the funding for  
16 the activities of the regional clean energy partner-  
17 ship under this section for years 3, 4, and 5.

18 (7) DURATION.—Each grant under paragraph  
19 (1) shall be for a period of not longer than 5 years.

20 (8) RENEWAL.—A grant award made to a re-  
21 gional clean energy innovation partnership under  
22 this section may be renewed for a period of not more  
23 than 5 years, subject to a rigorous merit review  
24 based on the progress of a regional clean energy in-  
25 novation partnership towards achieving the purposes

1 of the program in section (c) and the metrics devel-  
2 oped under section (h).

3 (9) ADMINISTRATIVE COSTS.—The Secretary  
4 may allow a covered consortium that receives funds  
5 under this section to allocate a portion of the fund-  
6 ing received to be used for administrative or indirect  
7 costs.

8 (10) FUNDING.—The Secretary may accept  
9 funds from other Federal agencies to support fund-  
10 ing and activities under this section.

11 (e) PLANNING FUNDS.—The Secretary may competi-  
12 tively award grants in an amount no greater than  
13 \$2,000,000 for a period not longer than 2 years to an enti-  
14 ty consisting of a government entity, including a State,  
15 local, or tribal government or unit of such government or  
16 any entity listed under subsection (a)(2) to plan a regional  
17 clean energy innovation partnership or establish a covered  
18 consortium for the purpose of applying for funds under  
19 subsection (b).

20 (f) INFORMATION SHARING.—As part of the pro-  
21 gram, the Secretary shall support the gathering, analysis,  
22 and dissemination of information on best practices for de-  
23 veloping and operating successful regional clean energy in-  
24 novation partnerships.

1 (g) METRICS.—In evaluating a grant renewals under  
2 section (d)(8), the Secretary shall work with program eval-  
3 uation experts to develop and make publicly available  
4 metrics to assess the progress of a regional clean energy  
5 innovation partnership towards achieving the purposes of  
6 the program in section (c). Such metrics may include—

7 (1) the number and quality of—

8 (A) new clean energy companies created in  
9 the region as a result of activities carried out  
10 under the regional clean energy innovation part-  
11 nership;

12 (B) new or expanded workforce develop-  
13 ment or training programs; and

14 (C) support services provided to clean en-  
15 ergy technology developers in the region;

16 (2) changes in clean energy employment in the  
17 region as a result of activities carried out under the  
18 regional clean energy innovation partnership; and

19 (3) the amount of capital investment in clean  
20 energy companies in the region as a result of activi-  
21 ties carried out under the regional clean energy in-  
22 novation partnership grant.

23 (h) COORDINATION.—In carrying out the program,  
24 the Secretary may coordinate with relevant programs at  
25 other Federal agencies, including—

1           (1) the Office of Innovation and Entrepreneur-  
2           ship under the Economic Development Administra-  
3           tion, including the Regional Innovation Program  
4           under section 27 of the Stevenson-Wydler Tech-  
5           nology Innovation Act of 1980 (15 U.S.C. 3722);

6           (2) the Hollings Manufacturing Extension Part-  
7           nership Program under section 25(a) of the National  
8           Institute of Standards and Technology Act (15  
9           U.S.C. 278k);

10          (3) the Manufacturing USA Program under  
11          section 34(a) of the National Institute of Standards  
12          and Technology Act (15 U.S.C. 278s);

13          (4) the Defense Manufacturing Communities  
14          Support Program under section 846 of the John S.  
15          McCain National Defense Authorization Act for Fis-  
16          cal Year 2019 (10 U.S.C. 2501 note); and

17          (5) the Office of Economic Adjustment at the  
18          Department of Defense.

19          (i) EVALUATION BY COMPTROLLER GENERAL.—Not  
20          later than 3 years after the date of the enactment of this  
21          Act, and every 3 years thereafter, the Comptroller General  
22          shall submit to the Committee on Science, Space, and  
23          Technology of the House of Representatives and the Com-  
24          mittee on Energy and Natural Resources of the Senate

1 an evaluation on the operation of the program during the  
2 most recent 3-year period, including—

3 (1) an assessment of the progress made towards  
4 achieving the purposes specified in subsection (c)  
5 based on the metrics developed under subsection (h);

6 (2) the short-term and long-term metrics used  
7 to determine the success of the program under sub-  
8 section (h), and any changes recommended to the  
9 metrics used;

10 (3) the regional clean energy innovation part-  
11 nerships that have received grants under subsection  
12 (d); and

13 (4) any recommendations on how the program  
14 may be improved.

15 (j) NATIONAL LABORATORIES.—In supporting tech-  
16 nology transfer activities at the National Laboratories, the  
17 Secretary shall encourage partnerships with entities that  
18 are located in the same region or State as the National  
19 Laboratory.

20 (k) AUTHORIZATION OF APPROPRIATIONS.—There  
21 are authorized to be appropriated to the Secretary to carry  
22 out this section \$50,000,000 for each of fiscal years 2021  
23 through 2025.

1 **SEC. 102. NATIONAL CLEAN ENERGY INCUBATOR PRO-**  
2 **GRAM.**

3 (a) CLEAN ENERGY INCUBATOR DEFINED.—In this  
4 section, the term “clean energy incubator”—

5 (1) means any entity that is designed to accel-  
6 erate the commercial application of clean energy  
7 technologies by providing—

8 (A) physical workspace, labs, and proto-  
9 typing facilities to support clean energy  
10 startups or established clean energy companies;  
11 or

12 (B) companies developing such tech-  
13 nologies with support, resources, and services,  
14 including—

15 (i) access to business education and  
16 counseling;

17 (ii) mentorship opportunities; and

18 (iii) other services rendered for the  
19 purpose of aiding the development and  
20 commercial application of a clean energy  
21 technology; and

22 (2) may include a program within or established  
23 by a National Laboratory, an institution of higher  
24 education or a State, local, or tribal government.

25 (b) PROGRAM ESTABLISHMENT.—Not later than 180  
26 days after the enactment of this Act, the Secretary, acting



1 through the Technology Transfer Coordinator established  
2 in section 1001(a) of the Energy Policy Act of 2005 (42  
3 U.S.C. 16391(a)), shall establish a Clean Energy Incu-  
4 bator Program (herein referred to as the “program”) to  
5 competitively award grants to clean energy incubators.

6 (c) CLEAN ENERGY INCUBATOR SELECTION.—In  
7 awarding grants to clean energy incubators under sub-  
8 section (b), the Secretary shall prioritize funding clean en-  
9 ergy incubators that—

10 (1) partner with entities that carry out activi-  
11 ties relevant to the activities of such incubator and  
12 that operate at the local, State, and regional levels;

13 (2) support the commercial application activi-  
14 ties of startup companies focused on physical hard-  
15 ware, computational, or integrated hardware and  
16 software technologies;

17 (3) are located in geographically diverse regions  
18 of the United States;

19 (4) are located in, or partner with entities lo-  
20 cated in, economically-distressed areas;

21 (5) support the development of entities focused  
22 on expanding clean energy tools and technologies to  
23 low-income and frontline communities;

1           (6) support the commercial application of tech-  
2           nologies being developed by clean energy entre-  
3           preneurs from underrepresented backgrounds; and

4           (7) have a plan for sustaining activities of the  
5           incubator after grant funds received under this pro-  
6           gram have been expended.

7           (d) AWARD LIMITS.—The Secretary shall not award  
8           more than \$4,000,000 to one or more incubators in one  
9           given State, per fiscal year.

10          (e) DURATION.—Each grant under subsection (b)  
11          shall be for a period of no longer than 5 years, subject  
12          to the availability of appropriations.

13          (f) USE OF FUNDS.—An entity receiving a grant  
14          under this section may use grant amounts for operating  
15          expenses.

16          (g) RENEWAL.—An award made to a clean energy  
17          incubator under this section may be renewed for a period  
18          of not more than 3 years, subject to merit review.

19          (h) EVALUATION.—In accordance with section 307(b)  
20          of this Act, the Secretary shall submit 3 years after the  
21          enactment of this Act and every 3 years thereafter to the  
22          Committee on Science, Space, and Technology of the  
23          House of Representatives and the Committee on Energy  
24          and Natural Resources of the Senate an evaluation of the

1 program established under this section that includes anal-  
 2 yses of the performance of the clean energy incubators.

3 (i) AUTHORIZATION OF APPROPRIATIONS.—There  
 4 are authorized to be appropriated to the Secretary to carry  
 5 out this section \$15,000,000 for each of fiscal years 2021  
 6 through 2025.

7 **SEC. 103. CLEAN ENERGY TECHNOLOGY UNIVERSITY PRIZE**  
 8 **COMPETITION.**

9 (a) DEFINITIONS.—In this section:

10 (1) ELIGIBLE ENTITY.—The term “eligible enti-  
 11 ty” means a nonprofit entity, an institution of high-  
 12 er education, or an entity working with one or more  
 13 institutes of higher education.

14 (2) MINORITY-SERVING INSTITUTION.—The  
 15 term “minority-serving institution” means an insti-  
 16 tution described in section 371(a) of the Higher  
 17 Education Act of 1965 (20 U.S.C. 1067q(a)).

18 (b) IN GENERAL.—The Secretary shall establish a  
 19 program, known as the “Clean Energy Technology Uni-  
 20 versity Prize”, to award funding for eligible entities to  
 21 carry out regional and one national clean energy tech-  
 22 nology prize competitions, under section 24 of the Steven-  
 23 son-Wydler Technology Innovation Act of 1980 (15 U.S.C.  
 24 3719). In carrying out such prize competitions, students  
 25 shall compete to develop a business model for furthering

1 the commercial application of an innovative clean energy  
2 technology. The purpose of this program is to encourage  
3 student interest in clean energy technology development  
4 and to help students solve challenges in clean energy tech-  
5 nology commercial application, with participation from di-  
6 verse geographical regions of the United States.

7 (c) TRAINING FUNDING.—In carrying out this pro-  
8 gram, the Secretary may provide funding to train partici-  
9 pating students in skills needed for the successful commer-  
10 cial application of clean energy technologies, including  
11 through virtual training sessions.

12 (d) PRIORITIZATION.—In awarding grants under this  
13 section, the Secretary shall prioritize awarding grants to  
14 eligible entities that work with students at minority-serv-  
15 ing institutions.

16 (e) COORDINATION.—In carrying out this program,  
17 the Secretary shall coordinate and partner with existing  
18 clean energy technology prize competitions. In doing so,  
19 the Secretary may develop and disseminate best practices  
20 for administering prize competitions under this section.

21 (f) REPORT.—In accordance with section 307(a) of  
22 this Act, the Secretary shall report annually on the  
23 progress and implementation of the program established  
24 under section (b).

1 (g) EVALUATION.—In accordance with section 307(b)  
2 of this Act, the Secretary shall submit 3 years after the  
3 enactment of this Act and every 3 years thereafter to the  
4 Committee on Science, Space, and Technology of the  
5 House of Representatives and the Committee on Energy  
6 and Natural Resources of the Senate an evaluation on the  
7 long-term outcomes of the program established under this  
8 section and the progress towards achieving the purposes  
9 of the program in subsection (b).

10 (h) AUTHORIZATION OF APPROPRIATIONS.—There  
11 are authorized to be appropriated to the Secretary to carry  
12 out the activities authorized in this section \$1,000,000 for  
13 each of fiscal years 2021 through 2025.

14 **SEC. 104. CLEAN ENERGY TECHNOLOGY TRANSFER CO-**  
15 **ORDINATION.**

16 (a) IN GENERAL.—The Secretary, acting through the  
17 Technology Transfer Coordinator established in section  
18 1001(a) of the Energy Policy Act of 2005 (42 U.S.C.  
19 16391(a)), shall support the coordination of relevant tech-  
20 nology transfer programs, including those authorized in  
21 sections 101, 102, 103, 202, and 206 of this Act, that  
22 advance the commercial application of clean energy tech-  
23 nologies nationally and across all energy sectors. In par-  
24 ticular, the Secretary may support activities to—

1           (1) facilitate the sharing of information on best  
2           practices for successful operation of clean energy  
3           technology transfer programs;

4           (2) coordinate resources and improve coopera-  
5           tion among clean energy technology transfer pro-  
6           grams;

7           (3) facilitate connections between entrepreneurs  
8           and start-up companies and the variety of programs  
9           related to clean energy technology transfer under the  
10          Department; and

11          (4) facilitate the development of metrics to  
12          measure the impact of clean energy technology  
13          transfer programs on—

14                (A) advancing the development, demonstra-  
15                tion, and commercial application of clean en-  
16                ergy technologies;

17                (B) increasing the competitiveness of  
18                United States in the clean energy sector, in-  
19                cluding in manufacturing; and

20                (C) commercial application of clean energy  
21                technologies being developed by entrepreneurs  
22                from under-represented backgrounds.

23          (b) AUTHORIZATION OF APPROPRIATIONS.—There  
24          are authorized to be appropriated to the Secretary to carry

1 out the activities in this section \$3,000,000 for each of  
2 fiscal years 2021 through 2025.

3 **TITLE II—SUPPORTING TECH-**  
4 **NOLOGY DEVELOPMENT AT**  
5 **THE NATIONAL LABORA-**  
6 **TORIES**

7 **SEC. 201. LAB PARTNERING SERVICE PILOT PROGRAM.**

8 (a) PILOT PROGRAM.—

9 (1) IN GENERAL.—The Secretary, acting  
10 through the Technology Transfer Coordinator estab-  
11 lished in section 1001(a) of the Energy Policy Act  
12 of 2005 (42 U.S.C. 16391(a)), shall establish a Lab  
13 Partnering Service Pilot Program (hereinafter in  
14 this section referred to as the “pilot program”).

15 (2) PURPOSES.—The purposes of the pilot pro-  
16 gram are to provide services that encourage and  
17 support partnerships between the National Labora-  
18 tories and public and private sector entities, and to  
19 improve communication of research, development,  
20 demonstration, and commercial application projects  
21 and opportunities at the National Laboratories to  
22 potential partners through the development of a  
23 website and the provision of services, in collaboration  
24 with relevant external entities.

1           (3) ACTIVITIES.—In carrying out this pilot pro-  
2       gram, the Secretary shall—

3                   (A) conduct outreach to and engage with  
4       relevant public and private entities;

5                   (B) identify and disseminate best practices  
6       for strengthening connections between the Na-  
7       tional Laboratories and public and private sec-  
8       tor entities; and

9                   (C) develop a website to disseminate infor-  
10      mation on—

11                   (i) different partnering mechanisms  
12      for working with the National Labora-  
13      tories;

14                   (ii) National Laboratory experts and  
15      research areas; and

16                   (iii) National Laboratory facilities and  
17      user facilities.

18       (b) METRICS.—The Secretary shall support the de-  
19      velopment of metrics, including conversion metrics, to de-  
20      termine the effectiveness of the pilot program in achieving  
21      the purposes in subsection (a) and the number and types  
22      of partnerships established between public and private sec-  
23      tor entities and the National Laboratories compared to  
24      baseline data.



1       (c) COORDINATION.—In carrying out the activities  
2 authorized in this section, the Secretary shall coordinate  
3 with the Directors and dedicated technology transfer staff  
4 at the National Laboratories, in particular for match-  
5 making services for individual projects, which should be  
6 led by the National Laboratories.

7       (d) FUNDING EMPLOYEE PARTNERING ACTIVI-  
8 TIES.—The Secretary shall delegate to the Directors the  
9 authority to compensate National Laboratory employees  
10 providing services under this section.

11       (e) DURATION.—Subject to the availability of appro-  
12 priations, the pilot program established in this section  
13 shall operate for not less than 3 years and may be built  
14 off an existing program.

15       (f) EVALUATION.—Not later than 6 months after the  
16 completion of this pilot program, the Secretary shall sup-  
17 port the evaluation of the success of the pilot program in  
18 achieving the purposes in subsection (a) and shall submit  
19 the evaluation to the Committee on Science, Space, and  
20 Technology of the House of Representatives and the Com-  
21 mittee on Energy and Natural Resources of the Senate.  
22 The assessment shall include analyses of the performance  
23 of the pilot program based on the metrics developed under  
24 subsection (b).

1 (g) AUTHORIZATION OF APPROPRIATIONS.—There  
2 are authorized to be appropriated to the Secretary  
3 \$2,000,000 for each of fiscal years 2021 through 2023  
4 to carry out subsections (a), (b), (c), (e), and (f) and  
5 \$1,700,000 for each of fiscal years 2021 through 2023  
6 for national laboratory employees to provide services under  
7 subsection (d).

8 **SEC. 202. LAB-EMBEDDED ENTREPRENEURSHIP PROGRAM.**

9 (a) IN GENERAL.—The Secretary shall competitively  
10 award grants to National Laboratories for the purpose of  
11 establishing or supporting Lab-Embedded Entrepreneur-  
12 ship Programs.

13 (b) PURPOSES.—The purposes of such programs are  
14 to provide entrepreneurial fellows with access to National  
15 Laboratory research facilities, National Laboratory exper-  
16 tise, and mentorship to perform research and development  
17 and gain expertise that may be required or beneficial for  
18 the commercial application of research ideas.

19 (c) ENTREPRENEURIAL FELLOWS.—An entrepre-  
20 neurial fellow participating in a program described in sub-  
21 section (a) shall be provided with—

22 (1) opportunities for entrepreneurial training,  
23 professional development, and exposure to leaders  
24 from academia, industry, government, and finance

1       who may serve as advisors to or partners of the fel-  
2       low;

3               (2) financial and technical support for research,  
4       development, and commercial application activities;

5               (3) fellowship awards to cover costs of living,  
6       health insurance, and travel stipends for the dura-  
7       tion of the fellowship; and

8               (4) any other resources determined appropriate  
9       by the Secretary.

10       (d) PROGRAM ACTIVITIES.—Each eligible entity that  
11   receives funding under this section shall support entrepre-  
12   neurial fellows by providing—

13               (1) access to facilities and expertise within the  
14       National Laboratory;

15               (2) engagement with external stakeholders; and

16               (3) market and customer development opportu-  
17       nities.

18       (e) ADMINISTRATION.—Eligible entities that receive  
19   grants under this section shall prioritize the support and  
20   success of the entrepreneurial fellow with regards to pro-  
21   fessional development and development of a relevant tech-  
22   nology.

23       (f) PARTNERSHIPS.—In carrying out a Lab-Embed-  
24   ded Entrepreneurship Program, a National Laboratory  
25   may partner with an external entity, including—

- 1 (1) a nonprofit organization;
- 2 (2) an institution of higher education; or
- 3 (3) a federally owned corporation.

4 (g) METRICS.—The Secretary shall support the de-  
5 velopment of short-term and long-term metrics to assess  
6 the effectiveness of programs receiving a grant under sub-  
7 section (a) in achieving the purposes of the program in  
8 subsection (a).

9 (h) EVALUATION.—In accordance with section 307(b)  
10 of this Act, not later than 3 years after the date of the  
11 enactment of this Act, and every 3 years thereafter, the  
12 Secretary shall submit to the Committee on Science,  
13 Space, and Technology of the House of Representatives  
14 and the Committee on Energy and Natural Resources of  
15 the Senate an evaluation of the effectiveness of the pro-  
16 grams under subsection (a) based on the metrics developed  
17 pursuant to subsection (g).

18 (i) COORDINATION.—The Secretary shall oversee the  
19 planning and coordination of grants under subsection (a)  
20 and shall identify and disseminate best practices for  
21 achieving the purposes of subsection (a) to eligible entities  
22 that receive grants under this section.

23 (j) INTERAGENCY COLLABORATION.—The Secretary  
24 shall collaborate with other executive branch agencies, in-  
25 cluding the Department of Defense and other agencies

1 with Federal laboratories, regarding opportunities to part-  
 2 ner with programs receiving a grant under subsection (a).

3 (k) AUTHORIZATION OF APPROPRIATIONS.—There  
 4 are authorized to be appropriated to the Secretary to carry  
 5 out the activities authorized in this section \$25,000,000  
 6 for each of fiscal years 2021 through 2025.

7 **SEC. 203. SMALL BUSINESS VOUCHER PROGRAM.**

8 Section 1003 of the Energy Policy Act of 2005 (42  
 9 U.S.C. 16393) is amended—

10 (1) in subsection (a)—

11 (A) in the matter preceding paragraph (1),  
 12 by striking “, and may require the Director of  
 13 a single-purpose research facility,” and insert-  
 14 ing “(as defined in section 2) and the Director  
 15 of each single-purpose research facility”;

16 (B) in paragraph (1)—

17 (i) by striking “increase” and insert-  
 18 ing “encourage”; and

19 (ii) by striking “collaborative re-  
 20 search,” and inserting “research, develop-  
 21 ment, demonstration, and commercial ap-  
 22 plication activities, including product devel-  
 23 opment,”;

24 (C) in paragraph (2), by striking “procure-  
 25 ment and collaborative research” and inserting

1 “procurement and the activities described in  
2 paragraph (1)”;

3 (D) in paragraph (3)—

4 (i) by inserting “facilities,” before  
5 “training”; and

6 (ii) by striking “procurement and col-  
7 laborative research activities” and insert-  
8 ing “procurement and the activities de-  
9 scribed in paragraph (1)”; and

10 (E) in paragraph (5), by striking “for the  
11 program under subsection (b)” and inserting  
12 “and metrics for the programs under sub-  
13 sections (b) and (c)”;

14 (2) by redesignating subsections (c) and (d) as  
15 subsections (d) and (e), respectively;

16 (3) by inserting after subsection (b) the fol-  
17 lowing:

18 “(c) SMALL BUSINESS VOUCHER PROGRAM.—

19 “(1) DEFINITIONS.—In this subsection:

20 “(A) DIRECTOR.—The term ‘Director’  
21 means—

22 “(i) the Director of each National  
23 Laboratory; and

24 “(ii) the Director of each single-pur-  
25 pose research facility.

1           “(B) NATIONAL LABORATORY.—The term  
2           ‘National Laboratory’ has the meaning given  
3           the term in section 2.

4           “(C) PROGRAM.—The term ‘program’  
5           means the program established under para-  
6           graph (2).

7           “(D) SMALL BUSINESS CONCERN.—The  
8           term ‘small business concern’ has the meaning  
9           given such term in section 3 of the Small Busi-  
10          ness Act (15 U.S.C. 632).

11          “(2) ESTABLISHMENT.—The Secretary, acting  
12          through the Technology Transfer Coordinator ap-  
13          pointed under section 1001(a), and in consultation  
14          with the Directors, shall establish a program to pro-  
15          vide small business concerns with vouchers under  
16          paragraph (3)—

17                 “(A) to achieve the goal described in sub-  
18                 section (a)(1); and

19                 “(B) to improve the products, services, and  
20                 capabilities of small business concerns in the  
21                 mission space of the Department.

22          “(3) VOUCHERS.—Under the program, the Di-  
23          rectors are authorized to provide to small business  
24          concerns vouchers to be used at National Labora-  
25          tories and single-purpose research facilities for—

1           “(A) research, development, demonstra-  
2           tion, technology transfer, or commercial appli-  
3           cation activities; or

4           “(B) any other activities that the applica-  
5           ble Director determines appropriate.

6           “(4) EXPEDITED APPROVAL.—The Secretary,  
7           working with the Directors, shall establish a stream-  
8           lined approval process for financial assistance agree-  
9           ments signed between—

10           “(A) small business concerns selected to  
11           receive a voucher under the program; and

12           “(B) the National Laboratories and single-  
13           purpose research facilities.

14           “(5) COST-SHARING REQUIREMENT.—In car-  
15           rying out the program, the Secretary shall require  
16           cost-sharing in accordance with section 988.

17           “(6) REPORT.—In accordance with section  
18           307(a) of the Energizing Technology Transfer Act,  
19           the Secretary shall report annually on the progress  
20           and implementation of the small business voucher  
21           program established under this section, including the  
22           number and locations of small businesses that re-  
23           ceived grants under this program.”; and

24           (4) in subsection (e) (as so redesignated), by  
25           striking “for activities under this section” and in-



1       serting “for activities under subsection (b)” and in-  
2       serting at the end “and for activities under sub-  
3       section (c) \$25,000,000 for each of fiscal years 2021  
4       through 2025”.

5   **SEC. 204. ENTREPRENEURIAL LEAVE PROGRAM.**

6       (a) IN GENERAL.—The Secretary shall delegate to  
7   Directors the authority to carry out an entrepreneurial  
8   leave program (referred to in this section as the “pro-  
9   gram”) to allow National Laboratory employees to take  
10   a full leave of absence from their position, with the option  
11   to return to that or a comparable position up to 3 years  
12   later, or a partial leave of absence, to advance the commer-  
13   cial application of energy and related technologies relevant  
14   to the mission of the Department.

15       (b) TERMINATION AUTHORITY.—Directors shall re-  
16   tain the authority to terminate National Laboratory em-  
17   ployees that participate in the program if such employees  
18   are found to violate terms prescribed by the National Lab-  
19   oratory at which such employee is employed.

20       (c) LICENSING.—To reduce barriers to participation  
21   in the program, the Secretary shall delegate to the Direc-  
22   tors the requirement to establish streamlined mechanisms  
23   for facilitating the licensing of technology that is the focus  
24   of National Laboratory employees who participate in the  
25   program.

1 (d) REPORT.—In accordance with section 307(a) of  
2 this Act, the Secretary shall report annually on the utiliza-  
3 tion of this authority at national laboratories, including  
4 the number of employees who participate in this program  
5 at each national laboratory and the number of employees  
6 who take a permanent leave from their positions at na-  
7 tional laboratories as a result of participating in this pro-  
8 gram.

9 (e) FEDERAL ETHICS.—Nothing in this section shall  
10 affect existing Federal ethics rules applicable to Federal  
11 personnel.

12 **SEC. 205. NATIONAL LABORATORY EMPLOYEE OUTSIDE EM-**  
13 **PLOYMENT AUTHORITY.**

14 (a) IN GENERAL.—The Secretary shall delegate to  
15 Directors of National Laboratories the authority to allow  
16 their employees—

17 (1) to engage in outside employment, including  
18 start-up companies based on licensing technologies  
19 developed at National Laboratories and consulting in  
20 their areas of expertise, and receive compensation  
21 from such entities; and

22 (2) to engage in outside activities related to  
23 their areas of expertise at the National Laboratory  
24 and may allow employees, in their employment ca-  
25 pacity at such outside employment, to access the

1 National Laboratories under the same contracting  
2 mechanisms as non-laboratory employees and enti-  
3 ties, in accordance with appropriate conflict of inter-  
4 est protocols.

5 (b) REQUIREMENTS.—If a Director elects to use the  
6 authority granted by subsection (a) of this section, the Di-  
7 rector, or their designee, shall—

8 (1) require employees to disclose to and obtain  
9 approval from the Director or their designee prior to  
10 engaging in any outside employment;

11 (2) develop and require appropriate conflict of  
12 interest protocols for employees that engage in out-  
13 side employment; and

14 (3) maintain the authority to terminate employ-  
15 ees engaging in outside employment if they are  
16 found to violate terms, including conflict of interest  
17 protocols, mandated by the Director.

18 (c) ADDITIONAL RESTRICTIONS.—Employees engag-  
19 ing in outside employment may not—

20 (1) sacrifice, hamper, or impede their duties at  
21 the National Laboratory;

22 (2) engage in activities related to outside em-  
23 ployment using National Laboratory government  
24 equipment, property, or resources, unless such ac-  
25 tivities are performed under National Laboratory

1 contracting mechanisms, such as Cooperative Re-  
2 search and Development Agreement or Strategic  
3 Partnership Projects, whereby all conflicts of inter-  
4 est requirements apply; or

5 (3) use their position at a National Laboratory  
6 to provide an unfair competitive advantage to an  
7 outside employer or start-up activity.

8 (d) FEDERAL ETHICS.—Nothing in this section shall  
9 affect existing Federal ethics rules applicable to Federal  
10 personnel.

11 **SEC. 206. TECHNOLOGY COMMERCIALIZATION FUND.**

12 Section 1001(e) of the Energy Policy Act of 2005 (42  
13 U.S.C. 16391(e)) is amended to read as follows:

14 “(a) TECHNOLOGY COMMERCIALIZATION FUND.—

15 “(1) ESTABLISHMENT.—The Secretary, acting  
16 through the Technology Transfer Coordinator estab-  
17 lished in section 1001(a) of the Energy Policy Act  
18 of 2005 (42 U.S.C. 16391(a)), shall establish a  
19 Technology Commercialization Fund (hereafter re-  
20 ferred to as the ‘Fund’), using nine-tenths of one  
21 percent of the amount of appropriations made avail-  
22 able to the Department for applied energy research,  
23 development, demonstration, and commercial appli-  
24 cation for each fiscal year, to be used to provide, in  
25 accordance with the cost-sharing requirements under

1 section 988, funds to national laboratories to pro-  
2 mote promising energy technologies for commercial  
3 purposes.

4 “(2) APPLICATIONS.—

5 “(A) CONSIDERATIONS.—The Secretary  
6 shall develop criteria for evaluating applications  
7 for funding under this section, which may in-  
8 clude—

9 “(i) the potential that a proposed  
10 technology will result in a commercially  
11 successful product within a reasonable  
12 timeframe; and

13 “(ii) the relative maturity of a pro-  
14 posed technology for commercial applica-  
15 tion.

16 “(B) SELECTIONS.—In awarding funds  
17 under this section, the Secretary may give spe-  
18 cial consideration to applications that involve at  
19 least one applicant that has participated in an  
20 entrepreneurial or commercialization training  
21 program, such as Energy Innovation Corps.

22 “(3) ANNUAL REPORT.—The Secretary shall in-  
23 clude in the annual report required under subsection  
24 (h)(2)—

1           “(A) a description of the projects carried  
2           out with awards from the Fund for that fiscal  
3           year;

4           “(B) each project’s cost-share for that fis-  
5           cal year; and

6           “(C) each project’s partners for that fiscal  
7           year.

8           “(4) EVALUATION.—In accordance with section  
9           307(b) of the Energizing Technology Transfer Act,  
10          the Secretary shall submit 3 years after the enact-  
11          ment of that Act and every 3 years thereafter to the  
12          Committee on Science, Space, and Technology Com-  
13          mittee of the House of Representatives and the  
14          Committee on Energy and Natural Resources of the  
15          Senate an evaluation on the long-term commercial  
16          success of projects that received awards from the  
17          Fund.

18          “(5) TECHNOLOGY COMMERCIALIZATION FUND  
19          REPORT.—

20               “(A) IN GENERAL.—Not later than 1 year  
21               after the date of enactment of the Energizing  
22               Technology Transfer Act, the Secretary shall  
23               submit to the Committee on Science, Space,  
24               and Technology and Committee on Appropria-  
25               tions of the House of Representatives and the

1 Committee on Energy and Natural Resources  
2 and Committee on Appropriations of the Senate  
3 a report on the current and recommended im-  
4 plementation of the Fund.

5 “(B) CONTENTS.—The report under sub-  
6 paragraph (A) shall include—

7 “(i) a summary, with supporting data,  
8 of how much Department program offices  
9 contribute to and use the Fund each year,  
10 including a list of current funding restric-  
11 tions;

12 “(ii) recommendations on how to im-  
13 prove implementation and administration  
14 of the Fund; and

15 “(iii) an analysis on how to spend  
16 funds optimally on technology areas that  
17 have the greatest need and opportunity for  
18 commercial application, rather than spend-  
19 ing funds at the programmatic level or  
20 under current funding restrictions.”.

21 **SEC. 207. SIGNATURE AUTHORITY.**

22 (a) IN GENERAL.—Subject to subsections (b) and (c),  
23 the Secretary shall delegate to Directors of the National  
24 Laboratories signature authority with respect to any  
25 agreement described in subsection (b) the total cost of

1 which, including the National Laboratory contributions  
2 and project recipient cost share, is less than \$1,000,000,  
3 if such an agreement falls within the scope of—

4 (1) the strategic plan for the National Labora-  
5 tory or a master scope of work that has been ap-  
6 proved by the Department; or

7 (2) the most recent budget approved by Con-  
8 gress for Department activities to be carried out by  
9 the National Laboratory.

10 (b) AGREEMENTS.—Subsection (a) applies to—

11 (1) a cooperative research and development  
12 agreement;

13 (2) a strategic partnership project;

14 (3) prize competitions;

15 (4) an agreement for commercializing tech-  
16 nology; or

17 (5) any other agreement determined to be ap-  
18 propriate by the Secretary, in collaboration with the  
19 Directors.

20 (c) ADMINISTRATION.—

21 (1) ACCOUNTABILITY.—The Director of the af-  
22 fected National Laboratory and the affected con-  
23 tractor shall carry out an agreement under this sec-  
24 tion in accordance with applicable policies of the De-  
25 partment, including by ensuring that the agreement



1 does not compromise any national security, eco-  
2 nomic, or environmental interest of the United  
3 States.

4 (2) CERTIFICATION.—The Director of the af-  
5 fected National Laboratory and the affected con-  
6 tractor shall certify that each activity carried out  
7 under a project for which an agreement is entered  
8 into under this section does not present, or mini-  
9 mizes, any apparent conflict of interest, and avoids  
10 or neutralizes any actual conflict of interest, as a re-  
11 sult of the agreement under this section.

12 (3) AVAILABILITY OF RECORDS.—Not later  
13 than 30 days after the date on which a Director en-  
14 ters an agreement under this section, such Director  
15 shall submit to the Secretary for monitoring and re-  
16 view all records of the National Laboratory relating  
17 to the agreement.

18 (d) APPROVAL.—Upon granting the signature au-  
19 thority under in subsection (a), the Secretary may not re-  
20 quire any additional reviews or approvals of draft agree-  
21 ments, statements of work, or other documents for agree-  
22 ments that meet the criteria under subsection (a).

23 (e) EXCEPTION.—This section does not apply to any  
24 agreement with a foreign-controlled entity or entity under  
25 the majority control of any foreign entity.

1       (f) REPORT.—In accordance with section 307(a) of  
 2 this Act, the Secretary shall submit annually information  
 3 on the number and types of agreements signed using the  
 4 authorities granted under this section.

5       (g) EVALUATION.—Not later than 3 years after the  
 6 enactment of this Act the Secretary shall submit to the  
 7 Committee on Science, Space, and Technology of the  
 8 House of Representatives and the Committee on Energy  
 9 and Natural Resources of the Senate an evaluation of the  
 10 efficacy of reducing administrative burden for agreements  
 11 signed using the authorities granted under this section.

12       (h) CONFORMING AMENDMENT.—Section 12 of the  
 13 Stevenson-Wydler Technology Innovation Act of 1980 (15  
 14 U.S.C. 3710a) is amended—

15               (1) in subsection (a)—

16                       (A) by redesignating paragraphs (1) and  
 17                       (2) as subparagraphs (A) and (B), respectively,  
 18                       and indenting the subparagraphs appropriately;

19                       (B) by striking “Each Federal agency”  
 20                       and inserting the following:

21                       “(1) IN GENERAL.—Except as provided in para-  
 22                       graph (2), each Federal agency”; and

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

24                       “(2) EXCEPTION.—Notwithstanding paragraph  
 25                       (1), in accordance with section 207 of the Ener-

1 gizing Technology Transfer Act, approval by the  
 2 Secretary of Energy shall not be required for any  
 3 agreement proposed to be entered into by a National  
 4 Laboratory of the Department of Energy, the total  
 5 cost of which, including the National Laboratory  
 6 contributions and project recipient cost share, is less  
 7 than \$1,000,000.”; and

8 (2) in subsection (b), by striking “subsection  
 9 (a)(1)” each place it appears and inserting “sub-  
 10 section (a)(1)(A)”.

## 11 **TITLE III—DEPARTMENT OF** 12 **ENERGY MODERNIZATION**

### 13 **SEC. 301. TECHNOLOGY TRANSFER PROGRAM.**

14 Title X of the Energy Policy Act of 2005 (42 U.S.C.  
 15 16391 et seq.) is amended by adding at the end the fol-  
 16 lowing:

### 17 **“SEC. 1012. TECHNOLOGY TRANSFER PROGRAM.**

18 “(a) ESTABLISHMENT.—The Secretary shall carry  
 19 out a program, to be led by the Technology Transfer Coor-  
 20 dinator appointed in section 1001(a) who shall report di-  
 21 rectly to, and be appointed by, the Secretary, and shall  
 22 be the principal advisor to the Secretary on all matters  
 23 relating to technology transfer and commercial applica-  
 24 tion.

1       “(b) MISSION.—The mission of the program shall  
2 be—

3               “(1) to expand the commercial impact of the re-  
4 search investments of the Department; and

5               “(2) to advance the commercial application of  
6 technologies that reduce energy use, reduce green-  
7 house gas emissions and other pollutants, improve  
8 energy efficiency, mitigate other negative environ-  
9 mental consequences, or support other missions of  
10 the Department.

11       “(c) GOALS.—

12               “(1) IN GENERAL.—In carrying out the pro-  
13 gram, the Technology Transfer Coordinator shall,  
14 with respect to commercial application activities,  
15 meet all of the goals described in paragraph (2).

16               “(2) GOALS DESCRIBED.—The goals referred to  
17 in paragraph (1) are the following:

18                       “(A) Reduction of greenhouse gas emis-  
19 sions or other pollutants.

20                       “(B) Improvement of energy efficiency.

21                       “(C) Improvement of economic competi-  
22 tiveness.

23                       “(D) Enhancement of domestic energy se-  
24 curity and national security.

1                   “(E) Enhancement of the domestic work-  
2                   force relevant to energy and other sectors rel-  
3                   evant to the mission of the Department.

4           “(d) HIRING AND MANAGEMENT.—To carry out the  
5 program authorized in this section, the Under Secretary  
6 for Science may appoint personnel using the authorities  
7 in section 306 of this Act.

8           “(e) COLLABORATION.—In carrying out the mission  
9 and activities of the program, the Technology Transfer  
10 Coordinator shall coordinate with the senior leadership of  
11 the Department, other relevant offices of the Department,  
12 the Directors, the National Laboratories, the Technology  
13 Transfer Working Group established under section  
14 1001(d), the Technology Transfer Policy Board, and other  
15 stakeholders, including private industry.

16          “(f) REPORT.—In accordance with section 307(a) of  
17 this Act, the Secretary shall report annually on the activi-  
18 ties carried out by this program pertaining to the mission  
19 of the program in subsection (b) and the goals in sub-  
20 section (c).

21          “(g) AUTHORIZATION OF APPROPRIATIONS.—There  
22 are authorized to be appropriated to the Secretary to carry  
23 out the activities authorized in this section \$20,000,000  
24 for each of fiscal years 2021 through 2025.”.

1 **SEC. 302. MANAGEMENT OF DEMONSTRATION PROJECTS.**

2 (a) MANAGEMENT OF DEPARTMENT OF ENERGY  
3 DEMONSTRATION PROJECTS.—The Secretary, shall estab-  
4 lish a program to conduct project management and over-  
5 sight of demonstration projects that receive more than  
6 \$50,000,000 in funding from the Department, in coordi-  
7 nation with relevant staff from Department program of-  
8 fices. The purposes of this program are to—

9 (1) conduct evaluation of demonstration project  
10 proposals prior to selection of a project for funding;

11 (2) conduct independent oversight of the execu-  
12 tion of a demonstration project once funding has  
13 been awarded for such project; and

14 (3) ensure a balanced portfolio of investments  
15 in clean energy technology demonstration projects.

16 (b) DEMONSTRATION PROJECT MANAGEMENT EM-  
17 PLOYEES.—

18 (1) AUTHORITY.—In carrying out the program  
19 under subsection (a), the Under Secretary for  
20 Science shall appoint at least 2 full time employees  
21 to achieve the purposes of the program outlined in  
22 subsection (a) in coordination with relevant staff at  
23 Department program offices.

24 (2) HIRING AUTHORITY.—To carry out the pro-  
25 gram authorized in this section, the Under Secretary

1       for Science may hire personnel using the authorities  
2       in section 306 of this Act.

3       (c) DUTIES.—In carrying out the program in sub-  
4 section (a), employees under this section shall work with  
5 relevant staff from Department program offices to—

6           (1) evaluate demonstration project proposals,  
7       including the scope, technical specifications, matu-  
8       rity of design, funding profile, estimated costs, pro-  
9       posed schedule, proposed technical and financial  
10      milestones, and potential for commercial success  
11      based on economic and policy projections;

12          (2) develop independent cost estimates of dem-  
13      onstration project proposals, when appropriate;

14          (3) recommend to the director of a program of-  
15      fice whether to fund a demonstration project pro-  
16      posal;

17          (4) oversee the execution of the demonstration  
18      projects that receive funding from the Department  
19      under this section and conduct reviews of ongoing  
20      projects, which may include reconciling estimated  
21      costs as compared to actual costs and evaluating  
22      progress of the project based on the proposed sched-  
23      ule and technical and financial milestones, and pro-  
24      vide such reviews to the Secretary; and

1           (5) assess lessons learned and implement im-  
2       provements to evaluate and oversee demonstration  
3       projects carried out under this section.

4       (d) PROJECT TERMINATION.—Should an ongoing  
5       demonstration project receive an unfavorable review under  
6       subsection (c)(4), the director of a Department program  
7       office or their designee may cease funding the demonstra-  
8       tion project and reallocate the remaining funds to new or  
9       existing demonstration projects carried out by that pro-  
10      gram office.

11      (e) COORDINATION.—In establishing and carrying  
12      out the program, the Secretary shall coordinate with  
13      project management and acquisition management entities  
14      within the Department, including the Office of Project  
15      Management, and relevant professional organizations in  
16      project management, construction, cost estimation, and  
17      other relevant fields.

18      (f) REPORTING.—In accordance with section 307(a),  
19      the Secretary shall report annually on the utilization of  
20      the authority granted under this section, including a sum-  
21      mary of—

22           (1) any demonstration projects currently being  
23      carried out under this section; and



1           (2) a summary of the reviews under subsection  
2           (c)(4) of any ongoing demonstration projects carried  
3           out under this section.

4           (g) EVALUATION BY COMPTROLLER GENERAL.—Not  
5           later than 3 years after the date of the enactment of this  
6           Act the Comptroller General shall submit to the Com-  
7           mittee on Science, Space, and Technology of the House  
8           of Representatives and the Committee on Energy and  
9           Natural Resources of the Senate an evaluation on the op-  
10          eration of the program established under this section, in-  
11          cluding—

12           (1) the processes and procedures used to evalu-  
13           ate demonstration project proposals and oversee  
14           demonstration projects that receive funding under  
15           this section;

16           (2) any recommended changes to the program,  
17           including the structure and the processes and proce-  
18           dures used to evaluate and oversee demonstration  
19           projects that receive funding under this section; and

20           (3) any recommended changes to the structure  
21           of this program to improve the success in meeting  
22           the program purposes under subsection (a).

23 **SEC. 303. STREAMLINING PRIZE COMPETITIONS.**

24           Section 1008 of the Energy Policy Act of 2005 (42  
25           U.S.C. 16396) is amended by inserting after subsection

1 (d) the following (and redesignating subsections (f) and  
2 (g) as subsections (g) and (h), respectively):

3 “(e) COORDINATION.—In carrying out subsection (a),  
4 and for any prize competitions under section 105 of the  
5 America Creating Opportunities to Meaningfully Promote  
6 Excellence in Technology, Education, and Science Reau-  
7 thorization Act of 2010, the Secretary shall—

8 “(1) designate at least one full time employee  
9 to serve as a Department-wide point of contact on  
10 prize competitions;

11 “(2) issue Department-wide guidance on the de-  
12 sign, development, and implementation of prize com-  
13 petitions;

14 “(3) collect and disseminate best practices on  
15 the design and administration of prize competitions;

16 “(4) streamline contracting mechanisms for the  
17 implementation of prize competitions; and

18 “(5) provide training and prize competition de-  
19 sign support, as necessary, to Department staff to  
20 develop prize competitions and challenges.

21 “(f) REPORT.—In accordance with section 307(a) of  
22 the Energizing Technology Transfer Act, the Secretary  
23 shall report annually on a description of any prize com-  
24 petitions carried out using this authority, the total amount  
25 of prizes awarded along with any private sector contribu-

1 tions, the methods used for solicitation and evaluation,  
 2 and a description of how each prize competition advanced  
 3 the mission of the Department.”.

4 **SEC. 304. MILESTONE-BASED DEMONSTRATION PROJECTS.**

5 (a) IN GENERAL.—Acting under section 646(g) of  
 6 the Department of Energy Organization Act (42 U.S.C.  
 7 7256(g)), notwithstanding paragraph (10) of such section,  
 8 the Secretary may carry out demonstration projects as a  
 9 milestone-based demonstration project that requires par-  
 10 ticular technical and financial milestones to be met before  
 11 a participant is awarded grants by the Department  
 12 through a competitive award process.

13 (b) REQUIREMENTS.—In carrying out milestone-  
 14 based demonstration projects under the authority in para-  
 15 graph (1), the Secretary shall, for each relevant project—

16 (1) request proposals from eligible entities, as  
 17 determined by the Secretary, including—

18 (A) a business plan, that may include a  
 19 plan for scalable manufacturing and a plan for  
 20 addressing supply chain gaps;

21 (B) a plan for raising private sector invest-  
 22 ment; and

23 (C) proposed technical and financial mile-  
 24 stones, including estimated project timelines  
 25 and total costs; and

1           (2) award funding of a predetermined amount  
2           to projects that successfully meet proposed mile-  
3           stones under paragraph (1)(C) or for expenses  
4           deemed reimbursable by the Secretary, in accordance  
5           with terms negotiated for an individual award;

6           (3) require cost sharing in accordance with sec-  
7           tion 988 of the Energy Policy Act of 2005; and

8           (4) communicate regularly with selected eligible  
9           entities and, if the Secretary deems appropriate, ex-  
10          ercise small amounts of flexibility for technical and  
11          financial milestones as projects mature.

12          (c) AWARDS.—For the program established under  
13          subsection (a)—

14               (1) an award recipient shall be responsible for  
15               all costs until milestones are achieved, or reimburs-  
16               able expenses are reviewed and verified by the De-  
17               partment; and

18               (2) should an awardee not meet the milestones  
19               described in subsection (a), the Secretary or their  
20               designee may end the partnership with an award re-  
21               cipient and use the remaining funds in the ended  
22               agreement for new or existing projects carried out  
23               under this section.

24          (d) PROJECT MANAGEMENT.—In carrying out  
25          projects under this program and assessing the completion

1 of their milestones in accordance with subsection (b), the  
 2 Secretary shall consult with experts that represent diverse  
 3 perspectives and professional experiences, including those  
 4 from the private sector, to ensure a complete and thorough  
 5 review.

6 (e) REPORT.—In accordance with section 307(a), the  
 7 Secretary shall report annually on any demonstration  
 8 projects carried out using the authorities under this sec-  
 9 tion.

10 **SEC. 305. COST-SHARE WAIVER EXTENSION.**

11 (a) Section 988 of the Energy Policy Act of 2005 is  
 12 amended in subsection (b)(4)(B) by striking “this para-  
 13 graph” and inserting “the Energizing Technology Trans-  
 14 fer Act”.

15 (b) Section 108 of the Department of Energy Re-  
 16 search and Innovation Act is amended in subparagraph  
 17 (b) by striking “this Act” everywhere it appears and re-  
 18 placing with “the Energizing Technology Transfer Act”.

19 **SEC. 306. SPECIAL HIRING AUTHORITY FOR SCIENTIFIC,**  
 20 **ENGINEERING, AND PROJECT MANAGEMENT**  
 21 **PERSONNEL.**

22 (a) IN GENERAL.—The Under Secretary for Science  
 23 shall have the authority to—

24 (1) make appointments of scientific, engineer-  
 25 ing, and professional personnel, without regard to

1 civil service laws, to assist the Department in meet-  
2 ing specific project or research needs;

3 (2) fix the basic pay of any employee appointed  
4 under this section at a rate to be determined by the  
5 Under Secretary at rates not in excess of the Execu-  
6 tive Schedule (EX-II) without regard to the civil  
7 service laws; and

8 (3) pay any employee appointed under this sec-  
9 tion payments in addition to basic pay, except that  
10 the total amount of additional payments paid to an  
11 employee under this subsection for any 12-month pe-  
12 riod shall not exceed the lesser of the following  
13 amounts:

14 (A) \$25,000.

15 (B) The amount equal to 25 percent of the  
16 annual rate of basic pay of that employee.

17 (C) The amount of the limitation that is  
18 applicable for a calendar year under section  
19 5307(a)(1) of title 5, United States Code.

20 (b) TERM.—

21 (1) IN GENERAL.—The term of any employee  
22 appointed under this section shall not exceed 3 years  
23 unless otherwise authorized in law.

24 (2) TERMINATION.—The Under Secretary for  
25 Science shall have the authority to terminate any

1 employee appointed under this section at any time  
2 based on performance or changing project or re-  
3 search needs of the Department.

4 **SEC. 307. TECHNOLOGY TRANSFER REPORTS AND EVALUA-**  
5 **TION.**

6 (a) ANNUAL REPORT.—As part of the updated tech-  
7 nology transfer execution plan required each year under  
8 section 1001(h)(2) of the Energy Policy Act of 2005 (42  
9 U.S.C. 16391(g)(2)), the Secretary shall submit to the  
10 Committee on Science, Space, and Technology of the  
11 House of Representatives and the Committee on Energy  
12 and Natural Resources of the Senate a report on the  
13 progress and implementation of programs established  
14 under sections 103, 203, 204, 205, 207, 301, 302, 303,  
15 and 304 of this Act and section 1001(e) of the Energy  
16 Policy Act of 2005 (42 U.S.C. 16391(e)).

17 (b) EVALUATION.—Not later than 3 years after the  
18 enactment of this Act and every 3 years thereafter the  
19 Secretary shall submit to the Committee on Science,  
20 Space, and Technology of the House of Representatives  
21 and the Committee on Energy and Natural Resources of  
22 the Senate an evaluation on the extent to which programs  
23 established under sections 102, 103, 104, and 202 of this  
24 Act and section 1001(e) of the Energy Policy Act of 2005

1 (42 U.S.C. 16391(e)) are achieving success based on rel-  
2 evant short-term and long-term metrics.

3 (c) REPORT ON TECHNOLOGY TRANSFER GAPS.—  
4 Not later than 3 years after the enactment of this Act,  
5 the Secretary shall enter into an agreement with the Na-  
6 tional Academies of Science, Engineering, and Medicine  
7 to submit to the Committee on Science, Space, and Tech-  
8 nology of the House of Representatives and the Committee  
9 on Energy and Natural Resources of the Senate a report  
10 on programmatic gaps that exist to advance the commer-  
11 cial application of technologies developed at the National  
12 Laboratories.

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