

116TH CONGRESS
2D SESSION

S. 4725

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

IN THE SENATE OF THE UNITED STATES

SEPTEMBER 24, 2020

Mr. COONS (for himself and Mr. CASSIDY) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To establish programs 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 of 2020”.

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. Definitions.

TITLE I—NATIONAL CLEAN ENERGY TECHNOLOGY TRANSFER
PROGRAMS

- Sec. 101. Energy Innovation Corps Program.
 Sec. 102. Clean energy technology transfer coordination.

TITLE II—TECHNOLOGY DEVELOPMENT AT 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. Outside employment and activities for National Laboratory employees.

TITLE III—DEPARTMENT OF ENERGY MODERNIZATION

- Sec. 301. Management of large demonstration projects.
 Sec. 302. Streamlining prize competitions.
 Sec. 303. Extension of other transaction authority.
 Sec. 304. Milestone-based demonstration projects.
 Sec. 305. Cost-sharing.
 Sec. 306. Special hiring authority for scientific, engineering, and project management personnel.

TITLE IV—REPORTS

- Sec. 401. Updated technology transfer execution plan report.
 Sec. 402. Report on short- and long-term metrics.
 Sec. 403. Report on technology transfer gaps.

1 SEC. 2. DEFINITIONS.

2 In this Act:

3 (1) CLEAN ENERGY TECHNOLOGY.—The term
4 “clean energy technology” means a technology that,
5 as determined by the Secretary, significantly—

6 (A) reduces energy use;

7 (B) increases energy efficiency;

8 (C) reduces greenhouse gas emissions;

9 (D) reduces emissions of other pollutants;

10 or

11 (E) mitigates other negative environmental
12 consequences.

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

3 (3) INSTITUTION OF HIGHER EDUCATION.—The
4 term “institution of higher education” has the
5 meaning given the term in section 101 of the Higher
6 Education Act of 1965 (20 U.S.C. 1001).

7 (4) NATIONAL LABORATORY.—The term “Na-
8 tional Laboratory” has the meaning given the term
9 in section 2 of the Energy Policy Act of 2005 (42
10 U.S.C. 15801).

11 (5) SECRETARY.—The term “Secretary” means
12 the Secretary of Energy.

13 **TITLE I—NATIONAL CLEAN EN-**
14 **ERGY TECHNOLOGY TRANS-**
15 **FER PROGRAMS**

16 **SEC. 101. ENERGY INNOVATION CORPS PROGRAM.**

17 (a) DEFINITIONS.—In this section:

18 (1) ELIGIBLE PARTICIPANT.—The term “eligi-
19 ble participant” means—

20 (A) an employee of a National Laboratory;

21 (B) a researcher;

22 (C) a student; and

23 (D) a clean energy entrepreneur, as deter-
24 mined by the Secretary.

1 (2) SECRETARY.—The term “Secretary” means
2 the Secretary, acting through the Technology Trans-
3 fer Coordinator appointed under section 1001(a) of
4 the Energy Policy Act of 2005 (42 U.S.C.
5 16391(a)).

6 (b) ESTABLISHMENT.—The Secretary shall carry out
7 a program, to be known as the “Energy Innovation Corps
8 Program” (referred to in this section as “Energy I-
9 Corps”), to support entrepreneurial and commercial appli-
10 cation education, training, professional development, and
11 mentorship.

12 (c) PURPOSES.—The purposes of Energy I-Corps
13 are—

14 (1) to help eligible participants develop entre-
15 preneurial skills; and

16 (2) to accelerate the commercial application of
17 clean energy technologies.

18 (d) ACTIVITIES.—In carrying out Energy I-Corps,
19 the Secretary shall support, including through grants—

20 (1) market analysis and customer discovery for
21 clean energy technologies;

22 (2) entrepreneurial and commercial application
23 education, training, and mentoring activities, includ-
24 ing workshops, seminars, and short courses;

1 (3) engagement with private sector entities to
2 identify future research and development activities;
3 and

4 (4) any other activities that the Secretary de-
5 termines to be relevant to the purposes described in
6 subsection (c).

7 (e) STATE AND LOCAL PARTNERSHIPS.—In carrying
8 out Energy I–Corps, the Secretary may engage in partner-
9 ships with National Laboratories, State and local govern-
10 ments, economic development organizations, and nonprofit
11 organizations to broaden access to Energy I–Corps and
12 support activities relevant to the purposes described in
13 subsection (c).

14 (f) AUTHORIZATION OF APPROPRIATIONS.—There
15 are authorized to be appropriated to the Secretary to carry
16 out Energy I–Corps—

17 (1) for eligible participants described in sub-
18 section (a)(1)(A), \$3,000,000 for each of fiscal years
19 2021 through 2025; and

20 (2) for eligible participants described in sub-
21 paragraphs (B) through (D) of subsection (a)(1),
22 \$3,000,000 for each of fiscal years 2021 through
23 2025.

1 **SEC. 102. CLEAN ENERGY TECHNOLOGY TRANSFER CO-**
2 **ORDINATION.**

3 (a) IN GENERAL.—The Secretary, acting through the
4 Technology Transfer Coordinator appointed under section
5 1001(a) of the Energy Policy Act of 2005 (42 U.S.C.
6 16391(a)), shall support the coordination of relevant tech-
7 nology transfer programs, including programs authorized
8 under this title and section 202, that advance the commer-
9 cial application of clean energy technologies nationally and
10 across all energy sectors.

11 (b) ACTIVITIES.—In carrying out subsection (a), the
12 Secretary may—

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

16 (2) coordinate resources and improve coopera-
17 tion among clean energy technology transfer pro-
18 grams;

19 (3) organize national platforms or events for
20 showcasing innovative companies and entrepreneurs
21 and promoting networking with prospective investors
22 and partners;

23 (4) facilitate connections between entrepreneurs
24 and startup companies and Department programs
25 related to clean energy technology transfer; and

1 (5) facilitate the development of metrics to
2 measure the impact of clean energy technology
3 transfer programs on—

4 (A) advancing the development, demonstra-
5 tion, and commercial application of clean en-
6 ergy technologies;

7 (B) job creation and workforce develop-
8 ment, including in low-income communities;

9 (C) increasing the competitiveness of the
10 United States in the clean energy sector, in-
11 cluding in manufacturing; and

12 (D) the advancement of clean energy tech-
13 nology companies led by entrepreneurs from
14 underrepresented backgrounds.

15 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
16 authorized to be appropriated to the Secretary to carry
17 out this section \$3,000,000 for each of fiscal years 2021
18 through 2025.

19 **TITLE II—TECHNOLOGY DEVELOP-**
20 **MENT AT NATIONAL LAB-**
21 **ORATORIES**

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

23 (a) DEFINITIONS.—In this section:

1 (1) PILOT PROGRAM.—The term “pilot pro-
2 gram” means the Lab Partnering Service Pilot Pro-
3 gram established under subsection (b).

4 (2) SECRETARY.—The term “Secretary” means
5 the Secretary, acting through the Technology Trans-
6 fer Coordinator appointed under section 1001(a) of
7 the Energy Policy Act of 2005 (42 U.S.C.
8 16391(a)).

9 (b) ESTABLISHMENT.—The Secretary shall establish
10 a pilot program, to be known as the “Lab Partnering
11 Service Pilot Program”—

12 (1) to provide services that encourage and sup-
13 port partnerships between the National Laboratories
14 and public and private sector entities; and

15 (2) to improve communication of research, de-
16 velopment, demonstration, and commercial applica-
17 tion projects and opportunities at the National Lab-
18 oratories to potential partners.

19 (c) EXISTING PROGRAM.—The pilot program may be
20 established within, or as an expansion of, an existing De-
21 partment program.

22 (d) ACTIVITIES.—In carrying out the pilot program,
23 the Secretary shall—

24 (1) conduct outreach to and engage with rel-
25 evant public and private sector entities;

1 (2) identify and disseminate best practices for
2 strengthening connections between the National
3 Laboratories and public and private sector entities;
4 and

5 (3) develop a website to disseminate informa-
6 tion on—

7 (A) different partnering mechanisms for
8 working with the National Laboratories;

9 (B) National Laboratory experts and re-
10 search areas; and

11 (C) National Laboratory facilities and user
12 facilities.

13 (e) COORDINATION.—In carrying out the pilot pro-
14 gram, the Secretary shall coordinate with the Directors
15 and dedicated technology transfer staff of the National
16 Laboratories, with a focus on matchmaking services for
17 individual projects led by the National Laboratories.

18 (f) METRICS.—The Secretary shall collaborate with
19 program evaluation experts to develop metrics to deter-
20 mine—

21 (1) the effectiveness of the pilot program in
22 achieving the purposes described in subsection (b);
23 and

24 (2) the number and types of partnerships estab-
25 lished between public and private sector entities and

1 the National Laboratories compared to historical
2 trends.

3 (g) FUNDING EMPLOYEE PARTNERING ACTIVI-
4 TIES.—The Secretary shall delegate to the Directors of
5 the National Laboratories the authority to establish, with-
6 out regard to title 5, United States Code, or any regula-
7 tion issued under that title, a mechanism for compen-
8 sating National Laboratory employees providing services
9 under the pilot program.

10 (h) DURATION.—Subject to the availability of appro-
11 priations, the pilot program shall operate for not less than
12 3 years.

13 (i) EVALUATION.—Not later than 180 days after the
14 date on which the pilot program terminates, the Secretary
15 shall submit to the Committee on Energy and Natural Re-
16 sources of the Senate and the Committee on Science,
17 Space, and Technology of the House of Representatives
18 a report that—

19 (1) evaluates the success of the pilot program
20 in achieving the purposes of the pilot program; and

21 (2) includes an analysis of the performance of
22 the pilot program based on the metrics developed
23 under subsection (f).

24 (j) AUTHORIZATION OF APPROPRIATIONS.—There is
25 authorized to be appropriated to the Secretary to carry

1 out this section \$3,700,000 for each of fiscal years 2021
2 through 2023, of which \$1,700,000 for each fiscal year
3 shall be used to carry out subsection (g).

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

5 (a) DEFINITIONS.—In this section:

6 (1) COVERED PROGRAM.—The term “covered
7 program” means a lab-embedded entrepreneurship
8 program established or supported by an eligible enti-
9 ty using a grant awarded under the program.

10 (2) ELIGIBLE ENTITY.—The term “eligible enti-
11 ty” means—

12 (A) a National Laboratory;

13 (B) a nonprofit organization;

14 (C) an institution of higher education; and

15 (D) a federally owned corporation.

16 (3) ENTREPRENEURIAL FELLOW.—The term
17 “entrepreneurial fellow” means an individual partici-
18 pating in a covered program.

19 (4) PROGRAM.—The term “program” means
20 the Lab-Embedded Entrepreneurship Program au-
21 thorized under subsection (b).

22 (b) PROGRAM.—The Secretary shall continue the pro-
23 gram within the Office of Energy Efficiency and Renew-
24 able Energy known as the “Lab-Embedded Entrepreneur-
25 ship Program”, under which the Secretary, or a designee

1 of the Secretary at a National Laboratory, shall award
2 grants to eligible entities for the purpose of establishing
3 or supporting a covered program.

4 (c) PURPOSE.—The purpose of a covered program is
5 to provide entrepreneurial fellows with access to National
6 Laboratory research facilities, expertise, and mentor-
7 ship—

8 (1) to perform research and development; and
9 (2) to gain expertise that may be required or
10 beneficial for the commercial application of research
11 ideas.

12 (d) ENTREPRENEURIAL FELLOWS.—

13 (1) IN GENERAL.—In participating in a covered
14 program, an entrepreneurial fellow shall be pro-
15 vided—

16 (A) by the Secretary or an eligible entity,
17 with—

18 (i) opportunities for entrepreneurial
19 training, professional development, and
20 networking through exposure to leaders
21 from academia, industry, government, and
22 finance, who may serve as advisors to or
23 partners of an entrepreneurial fellow;

1 (ii) financial and technical support for
2 research, development, and commercial ap-
3 plication activities;

4 (iii) fellowship awards to cover costs
5 of living, health insurance, and travel sti-
6 pends for the duration of the fellowship;
7 and

8 (iv) any other resources determined
9 appropriate by the Secretary; and

10 (B) by an eligible entity with—

11 (i) access to the facilities and exper-
12 tise of staff of a National Laboratory;

13 (ii) engagement with external stake-
14 holders; and

15 (iii) market and customer develop-
16 ment opportunities.

17 (2) PRIORITY.—In carrying out a covered pro-
18 gram, an eligible entity shall give priority to sup-
19 porting entrepreneurial fellows with respect to pro-
20 fessional development and development of a relevant
21 technology.

22 (e) METRICS.—The Secretary shall support the devel-
23 opment of short-term and long-term metrics to assess the
24 effectiveness of covered programs in achieving the pur-
25 poses of the program.

1 (f) COORDINATION; INTERAGENCY COLLABORA-
2 TION.—The Secretary shall—

3 (1) oversee the planning and coordination of
4 grants awarded under the program; and

5 (2) collaborate with other Federal agencies, in-
6 cluding the Department of Defense, regarding op-
7 portunities for Federal agencies to partner with cov-
8 ered programs.

9 (g) BEST PRACTICES.—The Secretary shall identify
10 and disseminate to eligible entities best practices for
11 achieving the purposes of the program.

12 (h) AUTHORIZATION OF APPROPRIATIONS.—There is
13 authorized to be appropriated to the Secretary to carry
14 out this section \$25,000,000 for each of fiscal years 2021
15 through 2025.

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

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

19 (1) in subsection (a)—

20 (A) by redesignating paragraphs (1)
21 through (5) as subparagraphs (A) through (E),
22 respectively, and indenting appropriately;

23 (B) in the matter preceding subparagraph

24 (A) (as so redesignated)—

1 (i) by striking “and may require the
2 Director of a single-purpose research facil-
3 ity” and inserting “the Director of each
4 single-purpose research facility, and the
5 Director of each covered facility”; and

6 (ii) by striking “The Secretary” and
7 inserting the following:

8 “(1) DEFINITION OF COVERED FACILITY.—In
9 this subsection, the term ‘covered facility’ means a
10 national security laboratory or nuclear weapons pro-
11 duction facility (as those terms are defined in sec-
12 tion 4002 of the Atomic Energy Defense Act (50
13 U.S.C. 2501)) that the Administrator of the Na-
14 tional Nuclear Security Administration determines is
15 within the mission of a program established under
16 subsection (b) or (c).

17 “(2) RESPONSIBILITIES.—The Secretary”; and
18 (C) in paragraph (2) (as so designated)—
19 (i) in subparagraph (A) (as so redesi-
20 gnated)—

21 (I) by striking “increase” and in-
22 serting “encourage”;

23 (II) by striking “collaborative re-
24 search,” and inserting “research, de-
25 velopment, demonstration, commercial

1 application activities, including prod-
2 uct development,”; and

3 (III) by striking “Laboratory or
4 single-purpose research facility” and
5 inserting “Laboratory, single-purpose
6 research facility, or covered facility, as
7 applicable”;

8 (ii) in subparagraph (B) (as so reded-
9 igned)—

10 (I) by striking “Laboratory or
11 single-purpose research facility” and
12 inserting “Laboratory, single-purpose
13 research facility, or covered facility, as
14 applicable,”; and

15 (II) by striking “procurement
16 and collaborative research along with”
17 and inserting “the activities described
18 in subparagraph (A) and”;

19 (iii) in subparagraph (C) (as so reded-
20 igned)—

21 (I) by inserting “facilities,” be-
22 fore “training”; and

23 (II) by striking “procurement
24 and collaborative research activities”

1 and inserting “the activities described
2 in subparagraph (A)”;

3 (iv) in subparagraph (D) (as so reded-
4 igned), by striking “Laboratory or sin-
5 iple-purpose research facility” and inserting
6 “Laboratory, single-purpose research facil-
7 ity, or covered facility, as applicable,”; and

8 (v) in subparagraph (E) (as so reded-
9 igned)—

10 (I) by striking “for the program
11 under subsection (b)” and inserting
12 “and metrics for the programs under
13 subsections (b) and (c)”;

14 (II) by striking “Laboratory or
15 single-purpose research facility” and
16 inserting “Laboratory, single-purpose
17 research facility, or covered facility, as
18 applicable”;

19 (2) by redesignating subsections (c) and (d) as
20 subsections (d) and (e), respectively;

21 (3) by inserting after subsection (b) the fol-
22 lowing:

23 “(c) SMALL BUSINESS VOUCHER PROGRAM.—

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

1 “(A) COVERED FACILITY.—The term ‘cov-
2 ered facility’ means a national security labora-
3 tory or nuclear weapons production facility (as
4 those terms are defined in section 4002 of the
5 Atomic Energy Defense Act (50 U.S.C. 2501))
6 that the Administrator of the National Nuclear
7 Security Administration determines is within
8 the mission of the program.

9 “(B) DIRECTOR.—The term ‘Director’
10 means—

11 “(i) the Director of a National Lab-
12 oratory;

13 “(ii) the Director of a single-purpose
14 research facility; and

15 “(iii) the Director of a covered facil-
16 ity.

17 “(C) PROGRAM.—The term ‘program’
18 means the program established under para-
19 graph (2).

20 “(2) ESTABLISHMENT.—The Secretary, acting
21 through the Technology Transfer Coordinator ap-
22 pointed under section 1001(a), and in consultation
23 with the Directors, shall establish a program to pro-
24 vide small business concerns with vouchers—

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

3 “(B) to improve the products, services, and
4 capabilities of small business concerns in the
5 mission space of the Department.

6 “(3) VOUCHERS.—Vouchers provided under the
7 program shall be used at National Laboratories, sin-
8 gle-purpose research facilities, and covered facilities
9 for—

10 “(A) research, development, demonstra-
11 tion, technology transfer, or commercial appli-
12 cation activities; or

13 “(B) any other activity that the applicable
14 Director determines appropriate.

15 “(4) EXPEDITED CONTRACTING.—The Sec-
16 retary, in collaboration with the Directors, shall es-
17 tablish a streamlined approval process for expedited
18 contracting between—

19 “(A) a small business concern selected to
20 receive a voucher under the program; and

21 “(B) a National Laboratory, single-pur-
22 pose research facility, or covered facility.

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

1 “(6) ANNUAL REPORT.—The Secretary shall in-
2 clude in the annual report required under section
3 1001(h)(2) a description of the implementation and
4 progress of the program, including, for the year cov-
5 ered by the report, the number and locations of
6 small business concerns that have received vouchers
7 under the program.”; and

8 (4) in subsection (e) (as so redesignated), by
9 striking “this section” and all that follows through
10 the period at the end and inserting “subsection (c)
11 \$25,000,000 for each of fiscal years 2021 through
12 2025.”.

13 **SEC. 204. ENTREPRENEURIAL LEAVE PROGRAM.**

14 (a) IN GENERAL.—The Secretary shall delegate to
15 each Director of a National Laboratory the authority to
16 carry out an entrepreneurial leave program (referred to
17 in this section as a “leave program”) to allow employees
18 of the National Laboratory to take, for the purpose of ad-
19 vancing the commercial application of energy and related
20 technologies relevant to the mission of the Department,
21 and notwithstanding any provision of title 5, United
22 States Code, or any regulation issued under that title—

23 (1) a full leave of absence, with the option to
24 return to the same or comparable position not more

1 than 3 years after the date on which the full leave
2 of absence begins; or

3 (2) a partial leave of absence.

4 (b) TERMINATION AUTHORITY.—Notwithstanding
5 any provision of title 5, United States Code, or any regula-
6 tion issued under that title, each Director of a National
7 Laboratory may remove any National Laboratory em-
8 ployee who participates in a leave program if the employee
9 is found to violate the terms by which that employee is
10 employed.

11 (c) LICENSING.—To reduce barriers to participation
12 in a leave program, the Secretary shall require each Direc-
13 tor of a National Laboratory to establish streamlined
14 mechanisms for facilitating the licensing of technology
15 that is the focus of a National Laboratory employee who
16 participates in a leave program.

17 (d) REPORT.—The Secretary shall include in each
18 updated technology transfer execution plan submitted
19 under section 1001(h)(2) of the Energy Policy Act of 2005
20 (42 U.S.C. 16391(h)(2)) information on the implementa-
21 tion of the leave program, including, for the year covered
22 by the report—

23 (1) the number of employees that have partici-
24 pated in the program at each National Laboratory;
25 and

1 (2) the number of employees that have taken a
2 permanent leave of absence.

3 **SEC. 205. OUTSIDE EMPLOYMENT AND ACTIVITIES FOR NA-**
4 **TIONAL LABORATORY EMPLOYEES.**

5 (a) IN GENERAL.—The Secretary shall delegate to
6 each Director of a National Laboratory the authority to
7 allow an employee of that National Laboratory, notwith-
8 standing any provision of title 5, United States Code, or
9 any regulation issued under that title—

10 (1) to engage in and receive compensation for
11 outside employment, including providing consulting
12 services, relating to licensing technologies developed
13 at a National Laboratory or an area of expertise of
14 the employee at the National Laboratory;

15 (2) to engage in other outside activities related
16 to the area of expertise of the employee at the Na-
17 tional Laboratory; and

18 (3) in the course of that outside employment or
19 activity, to access the National Laboratories under
20 the same contracting mechanisms as nonlaboratory
21 employees and entities, in accordance with appro-
22 priate conflict of interest protocols.

23 (b) REQUIREMENTS.—If a Director of National Lab-
24 oratory elects to use the authority delegated under sub-
25 section (a), the Director, or a designee, shall—

1 (1) require employees to obtain approval from
2 the Director or the designee prior to engaging in the
3 outside employment or activity described in that sub-
4 section;

5 (2) develop and require appropriate conflict of
6 interest protocols for employees that engage in that
7 outside employment or activity; and

8 (3) maintain the authority to terminate an em-
9 ployee engaging in that outside employment or activ-
10 ity if the employee is found to violate the applicable
11 terms of employment, including conflict of interest
12 protocols.

13 (c) RESTRICTIONS.—An employee of a National Lab-
14 oratory engaging in outside employment or activity per-
15 mitted under subsection (a) may not, in the course of or
16 due to that outside employment or activity—

17 (1) sacrifice, hamper, or impede the duties of
18 the employee at the National Laboratory;

19 (2) use National Laboratory equipment, prop-
20 erty, or resources unless that use is in accordance
21 with a National Laboratory contracting mechanism,
22 such as a cooperative research and development
23 agreement or a strategic partnership project, under
24 which all relevant conflict of interest requirements
25 apply; or

1 (3) use the position of the employee at a Na-
2 tional Laboratory to provide an unfair competitive
3 advantage to an outside employer or startup activity.

4 (d) REPORT.—The Secretary shall include in each
5 updated technology transfer execution plan submitted
6 under section 1001(h)(2) of the Energy Policy Act of 2005
7 (42 U.S.C. 16391(h)(2)) information on the use of the au-
8 thority delegated under this section.

9 **TITLE III—DEPARTMENT OF**
10 **ENERGY MODERNIZATION**

11 **SEC. 301. MANAGEMENT OF LARGE DEMONSTRATION**
12 **PROJECTS.**

13 (a) DEFINITION OF COVERED PROJECT.—In this sec-
14 tion, the term “covered project” means a Department
15 demonstration project that receives or is eligible to receive
16 not less than \$50,000,000 in funding from the Depart-
17 ment.

18 (b) ESTABLISHMENT.—The Secretary, in coordina-
19 tion with the heads of relevant Department program of-
20 fices, shall establish a program to conduct project manage-
21 ment and oversight of covered projects, including by—

22 (1) conducting evaluations of covered project
23 proposals prior to selection of a project for funding;

1 (2) conducting independent oversight of the
2 execution of a covered project after funding has been
3 awarded for that project; and

4 (3) ensuring a balanced portfolio of investments
5 in clean energy technology demonstration projects.

6 (c) DUTIES.—The head of the program established
7 under subsection (b), in coordination with the heads of
8 relevant Department program offices, shall—

9 (1) evaluate covered project proposals, including
10 scope, technical specifications, maturity of design,
11 funding profile, estimated costs, proposed schedule,
12 proposed technical and financial milestones, and po-
13 tential for commercial success based on economic
14 and policy projections;

15 (2) develop independent cost estimates of cov-
16 ered project proposals, if appropriate;

17 (3) recommend to the Director of a program of-
18 fice whether to fund a covered project proposal, as
19 appropriate;

20 (4) oversee the execution of covered projects, in-
21 cluding reconciling estimated costs compared to ac-
22 tual costs;

23 (5) conduct reviews of ongoing covered projects,
24 including—

1 (A) evaluating the progress of a covered
2 project based on the proposed schedule and
3 technical and financial milestones; and

4 (B) providing those evaluations to the Sec-
5 retary; and

6 (6) assess lessons learned and implement im-
7 provements to evaluate and oversee covered projects.

8 (d) PROJECT TERMINATION.—Notwithstanding any
9 other provision of law, if a covered project receives an un-
10 favorable review under subsection (c)(5), the Director of
11 the Department program office funding that project, or
12 a designee of that Director, may cease funding the project
13 and reallocate the remaining funds to a new or existing
14 covered project carried out by that program office.

15 (e) EMPLOYEES.—To carry out the program estab-
16 lished under subsection (b), the Secretary—

17 (1) shall appoint at least 2 full-time employees;
18 and

19 (2) may hire personnel pursuant to section 306.

20 (f) COORDINATION.—In carrying out the program es-
21 tablished under subsection (b), the Secretary shall coordi-
22 nate with—

23 (1) project management and acquisition man-
24 agement entities within the Department, including
25 the Office of Project Management; and

1 (2) professional organizations in project man-
2 agement, construction, cost estimation, and other
3 relevant fields.

4 (g) REPORT BY SECRETARY.—The Secretary shall in-
5 clude in each updated technology transfer execution plan
6 submitted under section 1001(h)(2) of the Energy Policy
7 Act of 2005 (42 U.S.C. 16391(h)(2)) information on the
8 implementation of and progress made under the program
9 established under subsection (b), including, for the year
10 covered by the report—

11 (1) the covered projects under the purview of
12 the program; and

13 (2) the review of each covered project under
14 subsection (c)(5).

15 (h) REPORT BY COMPTROLLER GENERAL.—Not later
16 than 3 years after the date of enactment of this Act, the
17 Comptroller General of the United States shall submit to
18 the Committee on Energy and Natural Resources of the
19 Senate and the Committee on Science, Space, and Tech-
20 nology of the House of Representatives an evaluation of
21 the operation of the program established under subsection
22 (b), including—

23 (1) the processes and procedures used to evalu-
24 ate covered project proposals and oversee covered
25 projects; and

1 (2) any recommended changes to the program,
2 including to—

3 (A) the processes and procedures described
4 in paragraph (1); and

5 (B) the structure of the program, for the
6 purpose of better carrying out the program.

7 **SEC. 302. STREAMLINING PRIZE COMPETITIONS.**

8 Section 1008 of the Energy Policy Act of 2005 (42
9 U.S.C. 16396) is amended—

10 (1) by redesignating subsections (e) and (f) as
11 subsections (g) and (f), respectively, and moving
12 those subsections so as to appear in alphabetical
13 order; and

14 (2) by inserting after subsection (d) the fol-
15 lowing:

16 “(e) COORDINATION.—In carrying out a program
17 under subsection (a), and for any prize competition car-
18 ried out under section 24 of the Stevenson-Wydler Tech-
19 nology Innovation Act of 1980 (15 U.S.C. 3719), the Sec-
20 retary shall—

21 “(1) designate at least 1 full-time employee to
22 serve as a Department-wide point of contact for the
23 program or prize competition, as applicable;

1 “(2) issue Department-wide guidance on the de-
2 sign, development, and implementation of a prize
3 competition;

4 “(3) collect and disseminate best practices on
5 the design and administration of a prize competition;

6 “(4) streamline contracting mechanisms for the
7 implementation of a prize competition; and

8 “(5) provide training and prize competition de-
9 sign support, as necessary, to Department staff to
10 develop prize competitions and challenges.

11 “(f) REPORT.—The Secretary shall include in the an-
12 nual report required under section 1001(h)(2) a descrip-
13 tion of, with respect to the programs carried out under
14 subsection (a) and prize competitions carried out under
15 section 24 of the Stevenson-Wydler Technology Innovation
16 Act of 1980 (15 U.S.C. 3719), for each year covered by
17 the report—

18 “(1) each program and prize competition car-
19 ried out;

20 “(2) the total amount of prizes awarded and
21 the total amount of private sector contributions, if
22 applicable;

23 “(3) the methods used for solicitation and eval-
24 uation; and

1 “(4) the manner in which each prize competi-
2 tion advances the mission of the Department.”.

3 **SEC. 303. EXTENSION OF OTHER TRANSACTION AUTHOR-**
4 **ITY.**

5 Section 646(g)(10) of the Department of Energy Or-
6 ganization Act (42 U.S.C. 7256(g)(10)) is amended by
7 striking “2020” and inserting “2030”.

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

9 (a) IN GENERAL.—Pursuant to section 646(g) of the
10 Department of Energy Organization Act (42 U.S.C.
11 7256(g)), the Secretary shall establish a program under
12 which the Secretary shall award funds to eligible entities,
13 as determined by the Secretary, to carry out milestone-
14 based demonstration projects that require technical and
15 financial milestones to be met before the eligible entity is
16 awarded funds.

17 (b) PROPOSALS.—An eligible entity shall submit to
18 the Secretary a proposal to carry out a milestone-based
19 demonstration project at such time, in such manner, and
20 containing such information as the Secretary may require,
21 including—

22 (1) a business plan, which may include a plan
23 for scalable manufacturing;

24 (2) a plan for raising private sector investment;

25 and

1 (3) proposed technical and financial milestones,
2 including estimated project timelines and total costs.

3 (c) AWARDS.—

4 (1) IN GENERAL.—The Secretary shall award
5 funds of a predetermined amount under subsection
6 (a)—

7 (A) for projects that successfully meet
8 project milestones; and

9 (B) for expenses determined reimbursable
10 by the Secretary, in accordance with terms ne-
11 gotiated for the award of funds.

12 (2) COST RESPONSIBILITY.—An eligible entity
13 that receives funds under subsection (a) shall be re-
14 sponsible for the costs of the milestone-based dem-
15 onstration project until—

16 (A) the applicable technical and financial
17 milestones are achieved; or

18 (B) reimbursable expenses are reviewed
19 and verified by the Department.

20 (3) FAILURE TO MEET MILESTONES.—If an eli-
21 gible entity that receives funds under subsection (a)
22 does not meet the milestones of the milestone-based
23 demonstration project, the Secretary or a designee
24 may cease funding the project and reallocate the re-

1 maintaining funds to new or existing milestone-based
2 demonstration projects.

3 (d) PROJECT MANAGEMENT.—In carrying out the
4 program established under subsection (a), including in as-
5 sessing the completion of milestones in each milestone-
6 based demonstration project awarded funds under the pro-
7 gram, the Secretary—

8 (1) shall consult with experts that represent di-
9 verse perspectives and professional experiences, in-
10 cluding experts from the private sector, to ensure a
11 complete and thorough review;

12 (2) shall communicate regularly with selected
13 eligible entities; and

14 (3) may allow for flexibilities in adjusting the
15 technical and financial milestones of a milestone-
16 based demonstration project as the demonstration
17 project matures.

18 (e) COST-SHARING.—Each milestone-based dem-
19 onstration project awarded funds under subsection (a)
20 shall require cost-sharing in accordance with section 988
21 of the Energy Policy Act of 2005 (42 U.S.C. 16352).

22 (f) REPORT.—The Secretary shall include in each up-
23 dated technology transfer execution plan submitted under
24 section 1001(h)(2) of the Energy Policy Act of 2005 (42
25 U.S.C. 16391(h)(2)) information on the implementation

1 of and progress made under the program established
2 under subsection (a), including, for the year covered by
3 the report, each milestone-based demonstration project
4 awarded funds under the program.

5 **SEC. 305. COST-SHARING.**

6 (a) **TERMINATION DATE EXTENSION FOR INSTITU-**
7 **TIONS OF HIGHER EDUCATION AND OTHER NONPROFIT**
8 **INSTITUTIONS.**—Section 988(b)(4)(B) of the Energy Pol-
9 icy Act of 2005 (42 U.S.C. 16352(b)(4)(B)) is amended
10 by striking “this paragraph” and inserting “the Ener-
11 gizing Technology Transfer Act of 2020”.

12 (b) **REPORTS.**—Section 108(b) of the Department of
13 Energy Research and Innovation Act (Public Law 115–
14 246; 132 Stat. 3134) is amended by striking “this Act”
15 each place it appears and inserting “the Energizing Tech-
16 nology Transfer Act of 2020”.

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

20 (a) **IN GENERAL.**—Without regard to the civil service
21 laws, the Secretary may—

22 (1) make appointments of scientific, engineer-
23 ing, and professional personnel to assist the Depart-
24 ment in meeting specific project or research needs;

1 (2) fix the basic pay of an employee appointed
2 under paragraph (1) at a rate to be determined by
3 the Secretary, but not in excess of the rate of pay
4 for level II of the Executive Schedule under section
5 5313 of title 5, United States Code; and

6 (3) pay an employee appointed under paragraph
7 (1) payments in addition to basic pay, except that
8 the total amount of additional payments for any 12-
9 month period shall not exceed the lesser of—

10 (A) \$25,000;

11 (B) the amount equal to 25 percent of the
12 annual rate of basic pay of that employee; and

13 (C) the amount of the limitation in a cal-
14 endar year under section 5307(a)(1) of title 5,
15 United States Code.

16 (b) TERM.—With respect to an employee appointed
17 under subsection (a)(1)—

18 (1) the term of such an employee shall be for
19 a period that is not longer than 3 years, unless a
20 longer term is explicitly authorized under law; and

21 (2) notwithstanding any provision of title 5,
22 United States Code, or any regulation issued under
23 that title, the Secretary may remove any such em-
24 ployee at any time based on—

25 (A) the performance of the employee; or

1 (B) changing project or research needs of
 2 the Department.

3 **TITLE IV—REPORTS**

4 **SEC. 401. UPDATED TECHNOLOGY TRANSFER EXECUTION** 5 **PLAN REPORT.**

6 Section 1001(h)(2) of the Energy Policy Act of 2005
 7 (42 U.S.C. 16391(h)(2)) is amended by striking “Con-
 8 gress” and all that follows through the period at the end
 9 and inserting the following: “Congress—

10 “(A) an updated execution plan; and

11 “(B) a report that, for the year covered by
 12 the report—

13 “(i) describes progress toward meet-
 14 ing the goals set forth in the execution
 15 plan;

16 “(ii) describes the funds expended
 17 under subsection (e); and

18 “(iii) contains any other information
 19 required to be included in the report—

20 “(I) under this title; and

21 “(II) under the Energizing Tech-
 22 nology Transfer Act of 2020.”.

23 **SEC. 402. REPORT ON SHORT- AND LONG-TERM METRICS.**

24 Not later than 3 years after the date of enactment
 25 of this Act, and every 3 years thereafter, the Secretary

1 shall submit to the Committee on Energy and Natural Re-
2 sources of the Senate and the Committee on Science,
3 Space, and Technology of the House of Representatives
4 a report that, with respect to each program established
5 under sections 101 and 202—

6 (1) includes an evaluation of the program; and

7 (2) describes the extent to which the program
8 is achieving the purposes of the program, based on
9 relevant short-term and long-term metrics, including
10 any metrics developed under the program, if applica-
11 ble.

12 **SEC. 403. REPORT ON TECHNOLOGY TRANSFER GAPS.**

13 Not later than 3 years after the date of enactment
14 of this Act, the Secretary shall—

15 (1) seek to enter into an agreement with the
16 National Academies of Sciences, Engineering, and
17 Medicine to study existing programmatic gaps in the
18 commercial application of technologies among Na-
19 tional Laboratories under programs supported by
20 the Department; and

21 (2) submit to the Committee on Energy and
22 Natural Resources of the Senate and the Committee
23 on Science, Space, and Technology of the House of

- 1 Representatives a report on the findings of the study
- 2 under paragraph (1).

○