

alteration, or repair work funded under div. D or an amendment by div. D of Pub. L. 117-58, including authority of Secretary of Labor, see section 18851 of this title.

SUBCHAPTER X—DEPARTMENT OF
ENERGY MANAGEMENT

§ 16391. Improved technology transfer of energy technologies

(a) Office of Technology Transitions

(1) Establishment

There is established within the Department an Office of Technology Transitions (referred to in this section as the “Office”).

(2) Mission

The mission of the Office shall be—

(A) to expand the commercial impact of the research investments of the Department; and

(B) to focus on commercializing technologies that support the missions of the Department, including reducing greenhouse gas emissions and other pollutants.

(3) Goals

(A) In general

In carrying out the mission and activities of the Office, the Chief Commercialization Officer appointed under paragraph (4) shall, with respect to commercialization activities, meet all of the goals described in subparagraph (B).

(B) Goals described

The goals referred to in subparagraph (A) are the following:

(i) Reduction of greenhouse gas emissions and other pollutants.

(ii) Ensuring economic competitiveness.

(iii) Enhancement of domestic energy security and national security.

(iv) Enhancement of domestic jobs.

(v) Improvement of energy efficiency.

(vi) Any other goals to support the transfer of technology developed by Department-funded programs to the private sector, as consistent with missions of the Department.

(4) Chief Commercialization Officer

(A) In general

The Office shall be headed by an officer, who shall be known as the “Chief Commercialization Officer”, and who shall report directly to, and be appointed by, the Secretary.

(B) Principal advisor

The Chief Commercialization Officer shall be the principal advisor to the Secretary on all matters relating to technology transfer and commercialization.

(C) Qualifications

The Chief Commercialization Officer shall be an individual who, by reason of professional background and experience, is specially qualified to advise the Secretary on matters pertaining to technology transfer at the Department.

(D) Duties

The Chief Commercialization Officer shall oversee—

(i) the activities of the Technology Transfer Working Group established under subsection (b);

(ii) the expenditure of funds allocated for technology transfer within the Department;

(iii) the activities of each technology partnership ombudsman appointed under section 7261c of this title; and

(iv) efforts to engage private sector entities, including venture capital companies.

(5) Coordination

In carrying out the mission and activities of the Office, the Chief Commercialization Officer shall coordinate with the senior leadership of the Department, other relevant program offices of the Department, National Laboratories, the Technology Transfer Working Group established under subsection (b), the Technology Transfer Policy Board, and other stakeholders (including private industry).

(6) Hiring and management

To carry out the program authorized in this section, the Under Secretary for Science may appoint personnel using the authorities in section 19321 of this title.

(7) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out the activities authorized in this section \$20,000,000 for each of fiscal years 2023 through 2027.

(b) Technology Transfer Working Group

The Secretary shall establish a Technology Transfer Working Group, which shall consist of representatives of the National Laboratories and single-purpose research facilities, to—

(1) coordinate technology transfer activities occurring at National Laboratories and single-purpose research facilities;

(2) exchange information about technology transfer practices, including alternative approaches to resolution of disputes involving intellectual property rights and other technology transfer matters; and

(3) develop and disseminate to the public and prospective technology partners information about opportunities and procedures for technology transfer with the Department, including opportunities and procedures related to alternative approaches to resolution of disputes involving intellectual property rights and other technology transfer matters.

(c) Technology Commercialization Fund

The Secretary shall establish an Energy Technology Commercialization Fund, using 0.9 percent of the amount made available to the Department for applied energy research, development, demonstration, and commercial application for each fiscal year based on future planned activities and the amount of the appropriations for the fiscal year, to be used to provide matching funds with private partners to promote promising energy technologies for commercial purposes.

(d) Technology transfer responsibility

Nothing in this section affects the technology transfer responsibilities of Federal employees under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.).

(e) Technology Commercialization Fund**(1) Establishment**

The Secretary, acting through the Chief Commercialization Officer established in subsection (a), shall establish a Technology Commercialization Fund (hereafter referred to as the “Fund”), using nine-tenths of one percent of the amount of appropriations made available to the Department for applied energy research, development, demonstration, and commercial application for each fiscal year, to be used to provide, in accordance with the cost-sharing requirements under section 16352 of this title, funds to private partners, including national laboratories, to promote promising energy technologies for commercial purposes.

(2) Applications**(A) Considerations**

The Secretary shall develop criteria for evaluating applications for funding under this section, which may include—

- (i) the potential that a proposed technology will result in a commercially successful product within a reasonable time-frame; and
- (ii) the relative maturity of a proposed technology for commercial application.

(B) Selections

In awarding funds under this section, the Secretary may give special consideration to applications that involve at least one applicant that has participated in an entrepreneurial or commercialization training program, such as Energy Innovation Corps.

(f) Annual report

The Secretary shall include in the annual report required under section 16391a(a) of this title—

- (1) description of the projects carried out with awards from the Fund for that fiscal year;
- (2) each project's cost-share for that fiscal year; and
- (3) each project's partners for that fiscal year.

(g) Technology commercialization fund report**(1) In general**

Not later than 1 year after December 27, 2020, the Secretary shall submit to the Committee on Science, Space, and Technology and Committee on Appropriations of the House of Representatives and the Committee on Energy and Natural Resources and Committee on Appropriations of the Senate a report on the current and recommended implementation of the Fund.

(2) Contents

The report under subparagraph (A) shall include—

- (A) a summary, with supporting data, of how much Department program offices con-

tribute to and use the Fund each year, including a list of current funding restrictions;

(B) recommendations on how to improve implementation and administration of the Fund; and

(C) an analysis on how to spend funds optimally on technology areas that have the greatest need and opportunity for commercial application, rather than spending funds at the programmatic level or under current funding restrictions.

(h) Planning and reporting**(1) In general**

Not later than 180 days after August 8, 2005, the Secretary shall submit to Congress a technology transfer execution plan.

(2) Updates

Each year after the submission of the plan under paragraph (1), the Secretary shall submit to Congress an updated execution plan and reports that describe progress toward meeting goals set forth in the execution plan and the funds expended under subsection (c).

(i) Additional technology transfer programs

The Secretary may develop additional programs to—

- (1) support regional energy innovation systems;
- (2) support clean energy incubators;
- (3) provide small business vouchers;
- (4) provide financial and technical assistance for entrepreneurial fellowships at national laboratories;
- (5) encourage students, energy researchers, and national laboratory employees to develop entrepreneurial skillsets and engage in entrepreneurial opportunities;
- (6) support private companies and individuals in partnering with National Laboratories; and
- (7) further support the mission and goals of the Office.

(Pub. L. 109–58, title X, §1001, Aug. 8, 2005, 119 Stat. 926; Pub. L. 113–291, div. C, title XXXI, §3144, Dec. 19, 2014, 128 Stat. 3902; Pub. L. 115–246, title I, §102, Sept. 28, 2018, 132 Stat. 3131; Pub. L. 116–260, div. Z, title IX, §§9001, 9003, Dec. 27, 2020, 134 Stat. 2595, 2597; Pub. L. 117–58, div. D, title XII, §41201(i), formerly §41201(g), Nov. 15, 2021, 135 Stat. 1131, renumbered §41201(i), Pub. L. 117–167, div. B, title VI, §10723(3), Aug. 9, 2022, 136 Stat. 1709; Pub. L. 117–167, div. B, title VI, §10722, Aug. 9, 2022, 136 Stat. 1708.)

Editorial Notes

REFERENCES IN TEXT

The Stevenson-Wydler Technology Innovation Act of 1980, referred to in subsec. (d), is Pub. L. 96–480, Oct. 21, 1980, 94 Stat. 2311, which is classified generally to chapter 63 (§3701 et seq.) of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see Short Title note set out under section 3701 of Title 15 and Tables.

AMENDMENTS

2022—Subsec. (a)(6), (7). Pub. L. 117–167, §10722, added pars. (6) and (7).

2021—Subsecs. (f) to (i). Pub. L. 117–58, §41201(i), formerly §41201(g), as renumbered by Pub. L. 117–167,

§10723(3), redesignated subsecs. (f) relating to planning and reporting and (g) relating to additional technology transfer programs as (h) and (i), respectively.

2020—Subsec. (a). Pub. L. 116-260, §9001(1), added subsec. (a) through par. (4)(B) and struck out former subsec. (a). Prior to amendment, text read as follows: “The Secretary shall appoint a Technology Transfer Coordinator to be the principal advisor to the Secretary on all matters relating to technology transfer and commercialization.”

Subsec. (a)(4)(C). Pub. L. 116-260, §9001(1), redesignated subsec. (b) as subpar. (C) of subsec. (a)(4) and substituted “The Chief Commercialization Officer” for “The Coordinator”.

Subsec. (a)(4)(D). Pub. L. 116-260, §9001(2)(B), (C), redesignated subsec. (c) as subpar. (D) of subsec. (a)(4), substituted “Duties” for “Duties of the Coordinator” in heading and “The Chief Commercialization Officer” for “The Coordinator” in introductory provisions, and redesignated pars. (1) to (4) of former subsec. (c) as cls. (i) to (iv), respectively, of subpar. (D).

Subsec. (a)(5). Pub. L. 116-260, §9001(3), added par. (5).
Subsec. (b). Pub. L. 116-260, §9001(4), redesignated subsec. (d) as (b). Former subsec. (b) effectively redesignated subpar. (C) of subsec. (a)(4).

Subsec. (c). Pub. L. 116-260, §9001(4), redesignated subsec. (e) as (c). Former subsec. (c) effectively redesignated subpar. (D) of subsec. (a)(4).

Subsec. (c)(1). Pub. L. 116-260, §9001(2)(A), substituted “subsection (b)” for “subsection (d)” in par. (1) prior to its redesignation as cl. (i) of subsec. (a)(4)(D).

Subsec. (d). Pub. L. 116-260, §9001(4), redesignated subsec. (f) as (d). Former subsec. (d) redesignated (b).

Subsec. (e). Pub. L. 116-260, §9003, amended subsec. (e) generally. Prior to amendment, text read as follows: “The Secretary shall permit the directors of the National Laboratories to use funds authorized to support technology transfer within the Department to carry out early stage and precommercial technology demonstration activities to remove technology barriers that limit private sector interest and demonstrate potential commercial applications of any research and technologies arising from National Laboratory activities.”

Pub. L. 116-260, §9001(4), redesignated subsec. (g) as (e). Former subsec. (e) redesignated (c).

Subsec. (f). Pub. L. 116-260, §9003, which directed the general amendment of subsec. (e) and included in the new text a subsec. (f) relating to annual report, was executed by adding such subsec. (f).

Pub. L. 116-260, §9001(4), redesignated subsec. (h) as (f) relating to planning and reporting. Former subsec. (f) redesignated (d).

Subsec. (f)(2). Pub. L. 116-260, §9001(5), substituted “subsection (c)” for “subsection (e)” in par. (2) of subsec. (f) relating to planning and reporting.

Subsec. (g). Pub. L. 116-260, §9003, which directed the general amendment of subsec. (e) and included in the new text a subsec. (g) relating to Technology Commercialization Fund report, was executed by adding such subsec. (g).

Pub. L. 116-260, §9001(6), added subsec. (g) relating to additional technology transfer programs. Former subsec. (g) redesignated (e).

Pub. L. 116-260, §9001(4), redesignated subsec. (g) as (e).

Subsec. (h). Pub. L. 116-260, §9001(4), redesignated subsec. (h) as (f) relating to planning and reporting.

2018—Subsecs. (g), (h). Pub. L. 115-246 added subsec. (g) and redesignated former subsec. (g) as (h).

2014—Subsec. (e). Pub. L. 113-291 inserted “based on future planned activities and the amount of the appropriations for the fiscal year” after “each fiscal year”.

Statutory Notes and Related Subsidiaries

WAGE RATE REQUIREMENTS

For provisions relating to rates of wages to be paid to laborers and mechanics on projects for construction,

alteration, or repair work funded under div. D or an amendment by div. D of Pub. L. 117-58, including authority of Secretary of Labor, see section 18851 of this title.

LAB PARTNERING SERVICE PILOT PROGRAM

Pub. L. 116-260, div. Z, title IX, §9002, Dec. 27, 2020, 134 Stat. 2596, as amended by Pub. L. 117-167, div. B, title VI, §10716, Aug. 9, 2022, 136 Stat. 1704, provided that:

“(a) PILOT PROGRAM.—

“(1) IN GENERAL.—The Secretary of Energy (in this section referred to as the ‘Secretary’), acting through the Chief Commercialization Officer established in section 1001(a) of the Energy Policy Act of 2005 (42 U.S.C. 16391(a)), shall establish a Lab Partnering Service Pilot Program (hereinafter in this section referred to as the ‘pilot program’).

“(2) PURPOSES.—The purposes of the pilot program are to provide services that encourage and support partnerships between the National Laboratories and public and private sector entities, and to improve communication of research, development, demonstration, and commercial application projects and opportunities at the National Laboratories to potential partners through the development of a website and the provision of services, in collaboration with relevant external entities, and to identify and develop metrics regarding the effectiveness of such partnerships.

“(3) ACTIVITIES.—In carrying out this pilot program, the Secretary shall—

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

“(B) identify and disseminate best practices for strengthening connections between the National Laboratories and public and private sector entities; and

“(C) develop a website to disseminate information on—

“(i) different partnering mechanisms for working with the National Laboratories;

“(ii) National Laboratory experts and research areas; and

“(iii) National Laboratory facilities and user facilities.

“(b) METRICS.—The Secretary shall support the development of metrics, including conversion metrics, to determine the effectiveness of the pilot program in achieving the purposes in subsection (a) and the number and types of partnerships established between public and private sector entities and the National Laboratories compared to baseline data.

“(c) COORDINATION.—In carrying out the activities authorized in this section, the Secretary shall coordinate with the Directors of (and dedicated technology transfer staff at) the National Laboratories, in particular for matchmaking services for individual projects, which should be led by the National Laboratories.

“(d) FUNDING EMPLOYEE PARTNERING ACTIVITIES.—The Secretary shall delegate to the Directors of each National Laboratory and single-purpose research facility of the Department the authority to compensate National Laboratory employees providing services under this section.

“(e) DURATION.—Subject to the availability of appropriations, the pilot program established in this section shall operate for not less than 3 years and may be built off an existing program.

“(f) EVALUATION.—Not later than 6 months after the completion of this pilot program, the Secretary shall support the evaluation of the success of the pilot program in achieving the purposes in subsection (a) and shall submit the evaluation to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate. The assessment shall include analyses of the performance of the pilot program based on the metrics developed under subsection (b).

“(g) DEFINITION.—In this section, the term ‘National Laboratory’ has the meaning given such term in sec-

tion 2(3) of the Energy Policy Act of 2005 (42 U.S.C. 15801(3)).

“(h) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary \$2,000,000 for each of fiscal years 2023 through 2025 to carry out subsections (a), (b), and (c), and \$1,700,000 for each of fiscal years 2023 through 2025 for National Laboratory employees to provide services under subsection (d).”

§ 16391a. Technology transfer reports and evaluation

(a) Annual report

As part of the updated technology transfer execution plan required each year under section 16391(h)(2) of this title, the Secretary of Energy (in this section referred to as the “Secretary”) shall submit to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report on the progress and implementation of programs established under sections 9001, 9002, 9003, 9004, and 9005 of this Act and under sections 10714, 10718, 10719, 10720, and 10723 of the Research and Development, Competition, and Innovation Act.

(b) Evaluation

Not later than 3 years after December 27, 2020, and every 3 years thereafter the Secretary shall submit to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate an evaluation on the extent to which programs established under sections 9001, 9002, 9003, 9004, and 9005 of this Act and sections 10713, 10714, 10715, and 10717 of the Research and Development, Competition, and Innovation Act are achieving success based on relevant short-term and long-term metrics.

(Pub. L. 116–260, div. Z, title IX, § 9007, Dec. 27, 2020, 134 Stat. 2600; Pub. L. 117–167, div. B, title VI, § 10727, Aug. 9, 2022, 136 Stat. 1710.)

Editorial Notes

REFERENCES IN TEXT

Sections 9001, 9002, 9003, 9004, and 9005 of this Act, referred to in text, are sections 9001, 9002, 9003, 9004, and 9005 of div. Z of Pub. L. 116–260, known as the Energy Act of 2020. Sections 9001 and 9003 of the Act amended section 16391 of this title. Section 9002 of the Act enacted provisions set out as a note under section 16391 of this title. Section 9004 of the Act amended section 16396 of this title. Section 9005 of the Act enacted section 7256c of this title.

The Research and Development, Competition, and Innovation Act, referred to in text, is div. B of Pub. L. 117–167, Aug. 9, 2022, 136 Stat. 1405. Sections 10713, 10714, 10715, 10717, 10719, and 10720 of the Act are classified to sections 19301 to 19303 and 19311 to 19313 of this title, respectively. Section 10718 of the Act amended section 16393 of this title. Section 10723 of the Act amended sections 16391 and 18861 of this title.

CODIFICATION

Section was enacted as part of the Energy Act of 2020, and not as part of the Energy Policy Act of 2005 which comprises this chapter.

AMENDMENTS

2022—Pub. L. 117–167 amended section generally. Prior to amendment, section consisted of subsecs. (a) to (c) relating to an annual report, evaluation, and report on technology transfer gaps, respectively.

§ 16392. Technology Infrastructure Program

(a) Definitions

In this section:

(1) Program

The term “Program” means the Technology Infrastructure Program established under subsection (b).

(2) Technology cluster

The term “technology cluster” means a concentration of technology-related business concerns, institutions of higher education, or non-profit institutions, that reinforce each other’s performance in the areas of technology development through formal or informal relationships.

(3) Technology-related business concern

The term “technology-related business concern” means a for-profit corporation, company, association, firm, partnership, or small business concern that—

- (A) conducts scientific or engineering research;
- (B) develops new technologies;
- (C) manufactures products based on new technologies; or
- (D) performs technological services.

(b) Establishment

The Secretary shall establish a Technology Infrastructure Program in accordance with this section.

(c) Purpose

The purpose of the Program shall be to improve the ability of National Laboratories and single-purpose research facilities to support departmental missions by—

- (1) stimulating the development of technology clusters that can support departmental missions at the National Laboratories or single-purpose research facilities;
- (2) improving the ability of National Laboratories and single-purpose research facilities to leverage and benefit from commercial research, technology, products, processes, and services; and
- (3) encouraging the exchange of scientific and technological expertise between—
 - (A) National Laboratories or single-purpose research facilities; and
 - (B) entities that can support departmental missions at the National Laboratories or single-purpose research facilities, such as—
 - (i) institutions of higher education;
 - (ii) technology-related business concerns;
 - (iii) nonprofit institutions; and
 - (iv) agencies of State, tribal, or local governments.

(d) Projects

The Secretary shall authorize the director of each National Laboratory or single-purpose research facility to implement the Program at the National Laboratory or facility through one or more projects that meet the requirements of subsections (e) and (f).

(e) Program requirements

(1) In general

Each project funded under this section shall meet the requirements of this subsection.