

LII > U.S. Code > Title 42 > CHAPTER 149 > SUBCHAPTER XVII > **§ 16538**

Quick search by citation:

Title

Section

Go!

42 U.S. Code § 16538 - Energy

U.S. Code Notes

(a) DEFINITIONS

In this section:

(1) ARPA-E

The term “ARPA-E” means the Advanced Research Projects Agency—Energy established by subsection (b).

(2) DIRECTOR

The term “Director” means the Director of ARPA-E appointed under subsection (d).

(3) FUND

The term “Fund” means the Energy Transformation Acceleration Fund established under subsection (o)(1).

(b) ESTABLISHMENT

There is established the Advanced Research Projects Agency—Energy within the Department to overcome the long-term and high-risk technological barriers in the development of transformative science and technology solutions to address the energy and environmental missions of the Department.

(c) GOALS

(1) IN GENERAL

The goals of ARPA-E shall be—

(A) to enhance the economic and energy security of the United States through the development of energy technologies that—

(i) reduce imports of energy from foreign sources;

(ii) reduce energy-related emissions, including greenhouse gases;

(iii) improve the energy efficiency of all economic sectors;

(iv) provide transformative solutions to improve the management, clean-up, and disposal of radioactive waste and spent nuclear fuel; and

(v) improve the resilience, reliability, and security of infrastructure to produce, deliver, and store energy; and

(B) to ensure that the United States maintains a technological lead in developing and deploying advanced energy technologies.

(2) MEANS

ARPA-E shall achieve the goals established under paragraph (1) through advanced technology projects by—

(A) identifying and promoting revolutionary advances in fundamental and applied sciences;

(B) translating scientific discoveries and cutting-edge inventions into technological innovations; and

(C) accelerating transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty.

(d) DIRECTOR**(1) APPOINTMENT**

There shall be in the Department of Energy a Director of ARPA-E, who shall be appointed by the President, by and with the advice and consent of the Senate.

(2) QUALIFICATIONS

The Director shall be an individual who, by reason of professional background and experience, is especially qualified to advise the Secretary on, and manage research programs addressing, matters pertaining to long-term and high-risk technological barriers to the development of energy technologies.

(3) RELATIONSHIP TO SECRETARY

The Director shall report to the Secretary.

(4) RELATIONSHIP TO OTHER PROGRAMS

No other programs within the Department shall report to the Director.

(e) RESPONSIBILITIES

The responsibilities of the Director shall include—

(1) approving all new programs within ARPA-E;

(2) developing funding criteria and assessing the success of programs through the establishment of technical milestones;

(3) administering the Fund through awards to institutions of higher education, companies, research foundations, trade and industry research collaborations, or consortia of such entities, which may include federally-funded research and development centers, to achieve the goals described in subsection (c) through targeted acceleration of—

(A) novel early-stage research with possible technology applications;

(B) development of techniques, processes, and technologies, and related testing and evaluation;

(C) research and development of advanced manufacturing process and technologies for the domestic manufacturing of novel energy technologies; and

(D) coordination with nongovernmental entities for demonstration of technologies and research applications to facilitate technology transfer;

(4) terminating programs carried out under this section that are not achieving the goals of the programs; and

(5) pursuant to subsection (c)(2)(C)—

(A) ensuring that applications for funding disclose the extent of current and prior efforts, including monetary investments as appropriate, in pursuit of the technology area for which funding is being requested;

(B) adopting measures to ensure that, in making awards, program managers adhere to the purposes of subsection (c)(2)(C); and

(C) providing as part of the annual report required by subsection (h)(1) a summary of the instances of and reasons for ARPA-E funding projects in technology areas already being undertaken by industry.

(f) AWARDS

In carrying out this section, the Director may provide awards in the form of grants, contracts, cooperative agreements, cash prizes, and other transactions.

(g) PERSONNEL

(1) IN GENERAL

The Director shall establish and maintain within ARPA-E a staff with sufficient qualifications and expertise to enable ARPA-E to carry out the responsibilities of ARPA-E under this section in conjunction with other operations of the Department.

(2) PROGRAM DIRECTORS

(A) In general

The Director shall designate employees to serve as program directors for the programs established pursuant to the responsibilities established for ARPA-E under subsection (e).

(B) Responsibilities

A program director of a program shall be responsible for—

(i) establishing research and development goals for the program, including through the convening of workshops and conferring with outside experts, and publicizing the goals of the program to the public and private sectors;

(ii) soliciting applications for specific areas of particular promise, especially areas that the private sector or the Federal Government are not likely to undertake alone;

(iii) building research collaborations for carrying out the program;

(iv) selecting on the basis of merit each of the projects to be supported under the program after considering—

(I) the novelty and scientific and technical merit of the proposed projects;

(II) the demonstrated capabilities of the applicants to successfully carry out the proposed project;

(III) the consideration by the applicant of future commercial applications of the project, including the feasibility of partnering with 1 or more commercial entities; and

(IV) such other criteria as are established by the Director;

(v) identifying innovative cost-sharing arrangements for ARPA-E projects, including through use of the authority provided under section 16352(b)(3) of this title;

(vi) monitoring the progress of projects supported under the program;

(vii) identifying mechanisms for commercial application of successful energy technology development projects, including through establishment of partnerships between awardees and commercial entities; and

(viii) recommending program restructure or termination of research partnerships or whole projects.

(C) Term

The term of a program manager shall be not more than 3 years and may be renewed.

(3) HIRING AND MANAGEMENT

(A) In general

The Director shall have the authority to—

(i) make appointments of scientific, engineering, and professional personnel without regard to the civil service laws;

(ii) fix the basic pay of such personnel at a rate to be determined by the Director at rates not in excess of Level II of the Executive Schedule (EX-II) without regard to the civil service laws; and

(iii) pay any employee appointed under this subparagraph payments in addition to basic pay, except that the total amount of additional payments paid to an employee under this subparagraph for any 12-month period shall not exceed the least of the following amounts:

(I) \$25,000.

(II) The amount equal to 25 percent of the annual rate of basic pay of the employee.

(III) The amount of the limitation that is applicable for a calendar year under [section 5307\(a\)\(1\) of title 5](#).

(B) Number

The [Director](#) shall appoint not more than 120 personnel under this section.

(C) Private recruiting firms

The [Secretary](#), or the [Director](#) serving as an agent of the [Secretary](#), may contract with private recruiting firms for the hiring of qualified technical staff to carry out this section.

(D) Additional staff

The [Director](#) may use all authorities in existence on August 9, 2007, that are provided to the [Secretary](#) to hire administrative, financial, and clerical staff as necessary to carry out this section.

(h) REPORTS AND ROADMAPS

(1) ANNUAL REPORT

As part of the annual budget request submitted for each fiscal year, the [Director](#) shall provide to the relevant authorizing and appropriations committees of Congress a report that—

(A) describes projects supported by [ARPA-E](#) during the previous fiscal year;

(B) describes projects supported by [ARPA-E](#) during the previous fiscal year that examine topics and technologies closely related to other activities funded by the [Department](#), and includes an analysis of whether in supporting such projects, the [Director](#) is in compliance with subsection (i)(1); and

(C) describes current, proposed, and planned projects to be carried out pursuant to subsection (e)(3)(D).

(2) STRATEGIC VISION ROADMAP

Not later than October 1, 2021, and every four years thereafter, the Director shall provide to the relevant authorizing and appropriations committees of Congress a roadmap describing the strategic vision that ARPA-E will use to guide the choices of ARPA-E for future technology investments over the following 4 fiscal years.

(i) COORDINATION AND NONDUPLICATION

(1) IN GENERAL

To the maximum extent practicable, the Director shall ensure that—

(A) the activities of ARPA-E are coordinated with, and do not duplicate the efforts of, programs and laboratories within the Department and other relevant research agencies; and

(B) ARPA-E does not provide funding for a project unless the prospective grantee demonstrates sufficient attempts to secure private financing or indicates that the project is not independently commercially viable.

(2) TECHNOLOGY TRANSFER COORDINATOR

To the extent appropriate, the Director may coordinate technology transfer efforts with the Technology Transfer Coordinator appointed under section 16391 of this title.

(j) FEDERAL DEMONSTRATION OF TECHNOLOGIES

The Director shall seek opportunities to partner with purchasing and procurement programs of Federal agencies to demonstrate energy technologies resulting from activities funded through ARPA-E.

(k) ADVICE

(1) ADVISORY COMMITTEES

The Director may seek advice on any aspect of ARPA-E from—

(A) an existing Department of Energy advisory committee; and

(B) a new advisory committee organized to support the programs of ARPA-E and to provide advice and assistance on—

(i) specific program tasks; or

(ii) overall direction of ARPA-E.

(2) ADDITIONAL SOURCES OF ADVICE

In carrying out this section, the Director may seek advice and review from—

(A) the President's Committee of Advisors on Science and Technology; and

(B) any professional or scientific organization with expertise in specific processes or technologies under development by ARPA-E.

(I) ARPA-E EVALUATION

(1) IN GENERAL

Not later than 3 years after December 27, 2020, the Secretary is authorized to enter into a contract with the National Academy of Sciences under which the National Academy shall conduct an evaluation of how well ARPA-E is achieving the goals and mission of ARPA-E.

(2) INCLUSIONS

The evaluation may include—

(A) a recommendation on whether ARPA-E should be continued or terminated; and

(B) a description of lessons learned from operation of ARPA-E, and the manner in which those lessons may apply to the operation of other programs of the Department.

(3) AVAILABILITY

On completion of the evaluation, the evaluation shall be made available to Congress and the public.

(m) EXISTING AUTHORITIES

The authorities granted by this section are—

(1) in addition to existing authorities granted to the Secretary; and

(2) are not intended to supersede or modify any existing authorities.

(n) PROTECTION OF INFORMATION

The following types of information collected by ARPA-E from recipients of financial assistance awards shall be considered commercial and financial

information obtained from a person and privileged or confidential and not subject to disclosure under [section 552\(b\)\(4\) of title 5](#):

(1) Plans for commercialization of technologies developed under the award, including business plans, technology-to-market plans, market studies, and cost and performance models.

(2) Investments provided to an awardee from third parties (such as venture capital firms, hedge [funds](#), and private equity firms), including amounts and the percentage of ownership of the awardee provided in return for the investments.

(3) Additional financial support that the awardee—

(A) plans to or has invested into the technology developed under the award; or

(B) is seeking from third parties.

(4) Revenue from the licensing or sale of new products or services resulting from research conducted under the award.

(o) FUNDING

(1) FUND

There is established in the Treasury of the United States a [fund](#), to be known as the “Energy Transformation Acceleration [Fund](#)”, which shall be administered by the [Director](#) for the purposes of carrying out this section.

(2) AUTHORIZATION OF APPROPRIATIONS

Subject to paragraph (4), there are authorized to be appropriated to the [Director](#) for deposit in the [Fund](#), without fiscal year limitation—

(A) \$435,000,000 for fiscal year 2021;

(B) \$500,000,000 for fiscal year 2022;

(C) \$575,000,000 for fiscal year 2023;

(D) \$662,000,000 for fiscal year 2024; and

(E) \$761,000,000 for fiscal year 2025.

(3) SEPARATE BUDGET AND APPROPRIATION

(A) Budget request

The budget request for ARPA-E shall be separate from the rest of the budget of the [Department](#).

(B) Appropriations

Appropriations to the Fund shall be separate and distinct from the rest of the budget for the Department.

(4) ALLOCATION

Of the amounts appropriated for a fiscal year under paragraph (2)—

(A) not more than 50 percent of the amount shall be used to carry out subsection (e)(3)(D);

(B) at least 5 percent of the amount shall be used for technology transfer and outreach activities, consistent with the goal described in subsection (c)(2)(C) and within the responsibilities of program directors described in subsection (g)(2)(B)(vii); and

(C) no funds may be used for construction of new buildings or facilities during the 5-year period beginning on August 9, 2007.

(Pub. L. 110–69, title V, § 5012, Aug. 9, 2007, 121 Stat. 621; Pub. L. 111–358, title IX, § 904, Jan. 4, 2011, 124 Stat. 4045; Pub. L. 115–246, title II, § 202, Sept. 28, 2018, 132 Stat. 3134; Pub. L. 116–260, div. Z, title X, § 10001, Dec. 27, 2020, 134 Stat. 2609.)



U.S. Code Toolbox

Law about... Articles from Wex

Table of Popular Names

Parallel Table of Authorities

How current is this?

[Accessibility](#)

[About LII](#)

[Contact us](#)

[Advertise here](#)

[Help](#)

[Terms of use](#)

[Privacy](#)