

113TH CONGRESS
2D SESSION

S. 2129

To amend the Department of Energy Organization Act to improve technology transfer at the Department of Energy by reducing bureaucratic barriers to industry, entrepreneurs, and small businesses, as well as ensure that public investments in research and development generate the greatest return on investment for taxpayers, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 13, 2014

Mr. UDALL of New Mexico introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To amend the Department of Energy Organization Act to improve technology transfer at the Department of Energy by reducing bureaucratic barriers to industry, entrepreneurs, and small businesses, as well as ensure that public investments in research and development generate the greatest return on investment for taxpayers, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Accelerating Tech-
3 nology Transfer to Advance Innovation for the Nation Act
4 of 2014” or the “ATTAIN Act of 2014”.

5 **SEC. 2. OFFICE OF ADVANCED RESEARCH, TECHNOLOGY**
6 **TRANSFER, AND INNOVATION IN ENERGY.**

7 Title II of the Department of Energy Organization
8 Act (42 U.S.C. 7131 et seq.) is amended by adding at
9 the end the following:

10 **“SEC. 218. OFFICE OF ADVANCED RESEARCH, TECHNOLOGY**
11 **TRANSFER, AND INNOVATION IN ENERGY.**

12 “(a) IN GENERAL.—There is established an Office of
13 Advanced Research, Technology Transfer, and Innovation
14 in Energy (referred to in this section as the ‘Office’),
15 based in Washington, DC, and under the direction of the
16 Technology Transfer Coordinator appointed under section
17 1001(a) of the Energy Policy Act of 2005 (42 U.S.C.
18 16391(a)), to improve the consolidation, coordination, and
19 use of technology transfer resources of the Department.

20 “(b) DUTIES.—The Office shall—

21 “(1) improve procurement, contracting, and
22 partnership procedures for technology transfer
23 through—

24 “(A) within the Department and National
25 Laboratories, the innovative use of existing
26 mechanisms (such as cooperative research and

1 development agreements) and the development
2 of new mechanisms (such as Agreements for
3 Commercializing Technology, technology invest-
4 ment agreements, and other transaction author-
5 ity) to improve the ability of the Department
6 and National Laboratories to procure, contract,
7 and partner with industry and business to im-
8 plement technology transfer activities;

9 “(B) the streamlining and improvement of
10 the review and approval process at all levels, for
11 existing and future technology transfer agree-
12 ments (including cooperative research and de-
13 velopment agreements) and the use of best
14 practices and process performance improvement
15 evaluation to reduce the time required to enable
16 the technology transfer activities of the Depart-
17 ment and National Laboratories to engage and
18 cooperate with industry and business at the
19 speed of opportunity; and

20 “(C) in connection with other Federal
21 agencies, other actions that improve the oper-
22 ational efficiency and technology transfer effec-
23 tiveness of the Department;

24 “(2) improve the sharing and coordination of
25 technology transfer information and resources

1 through actions such as the establishment of a single
2 website that can be used for technology transfer
3 within the Department;

4 “(3) establish and administer T²-Corps in ac-
5 cordance with section 219;

6 “(4) administer the technology transfer invest-
7 ment initiative in accordance with section 220;

8 “(5) improve the effectiveness of small business
9 innovation research programs and small business
10 technology transfer programs by—

11 “(A) strategically aligning topics areas in
12 requests for proposals to compliment research
13 and development capabilities at the National
14 Laboratories and funding opportunity an-
15 nouncements offered by Department programs
16 through better identification of technology read-
17 iness levels or commercialization readiness lev-
18 els to enable small business success; and

19 “(B) increasing coordination and use of
20 small business innovation research programs
21 and small business technology transfer pro-
22 grams across the Department and National
23 Laboratories to connect large research and de-
24 velopment investments to a strong and well-or-
25 ganized commercialization plan;

1 “(6) establish and administer an industry and
2 business technology transfer working group that—

3 “(A) parallels and complements the efforts
4 of the National Laboratory technology working
5 group;

6 “(B) shall convene regularly to make rec-
7 ommendations to the Department and National
8 Laboratories for use to assess capabilities and
9 implement improvements regarding—

10 “(i) priorities for commercialization;

11 “(ii) the assessment of technology tar-
12 gets;

13 “(iii) the evaluation of the impact of
14 technology transfer activities; and

15 “(iv) implementation of technology
16 transfer activities; and

17 “(C) shall carry out technology transfer
18 peer reviews that are similar to professional
19 peer reviews conducted by other agencies of the
20 Department, to evaluate the progress and im-
21 pact of the technology transfer programs and
22 activities of the Department and the National
23 Nuclear Security Administration;

24 “(7) encourage the use of alternative data
25 rights provisions by improving procurements lan-

1 guage to enable the Department and National Lab-
2 oratories to work with third parties with whom the
3 Department and National Laboratories have issued
4 a subcontract, to enable—

5 “(A) the third party to have full title, lim-
6 ited title, or partial use of any software or data
7 authored by the Department or National Lab-
8 oratories, if necessary and applicable; and

9 “(B) each relevant group to coordinate and
10 cooperate more effectively;

11 “(8) enable a platform or resource that allows
12 existing prenegotiated and express licensing pro-
13 grams to expand intellectual property bundling
14 agreements to encourage university, foundation, non-
15 profit, and industry partners to present licensable
16 intellectual property (along with the Department
17 and National Laboratories) within a common data-
18 base, with—

19 “(A) the database administered by the De-
20 partment and database content available to the
21 T²-Corps teams, the Department, and the Na-
22 tional Laboratories; and

23 “(B) the goal of the cooperation being to
24 create an effective process that enhances oppor-

1 tunities for technology transfer and commer-
2 cialization by—

3 “(i) encouraging and leveraging re-
4 search and development funds dedicated to
5 complementary projects;

6 “(ii) facilitating streamlined licensing
7 negotiations;

8 “(iii) encouraging cost-effective intel-
9 lectual property management and fulfilling
10 equal opportunity;

11 “(iv) minimizing potential for conflicts
12 in a manner that increases the access of
13 participants in T²-Corps to scientists and
14 engineers of National Laboratories; and

15 “(v) increasing the accessibility of li-
16 censable technology across larger numbers
17 of licensees;

18 “(9) coordinate with the Small Business Inno-
19 vation Research Program (SBIR) and Small Busi-
20 ness Technology Transfer Program (STTR) of the
21 Department—

22 “(A) to maximize the impact of technology
23 transfer opportunities and activities; and

1 “(B) to implement strategic changes that
2 are mutually beneficial to the Office and those
3 Programs;

4 “(10) carry out technology transfer evaluations,
5 measurement, and reporting functions of the De-
6 partment;

7 “(11) conduct an annual evaluation of the
8 progress and impact of the Office that—

9 “(A) is conducted through—

10 “(i) the working group established
11 under paragraph (6); and

12 “(ii) technology transfer peer reviews
13 that are similar to professional peer re-
14 views conducted by other agencies of the
15 Department;

16 “(B) includes information relating to the
17 economic and technology transfer impact of
18 technology transfer programs, which shall be
19 evaluated based on—

20 “(i) the types of employment opportu-
21 nities created, based on North American
22 Industry Classification System (NAICS)
23 employment data;

24 “(ii) the aggregate amount of follow-
25 on investment;

1 “(iii) the start-up survival and growth
2 rate;

3 “(iv) Department and National Lab-
4 oratory transactional efficiency for dif-
5 ferent phases of licensing cooperative re-
6 search and development agreements and
7 other technology transfer-related processes;

8 “(v) the effectiveness of local and re-
9 gional partnerships; and

10 “(vi) other key metrics determined by
11 the Secretary and the National Nuclear
12 Security Administration;

13 “(C) to the maximum extent practicable,
14 uses random sampling, retroactive data, and
15 other justifiable evaluation methodologies to
16 control the cost and scope of the evaluations
17 and the collection and analysis of data relevant
18 to the metrics described in this paragraph; and

19 “(D) provides for—

20 “(i) the continuous monitoring of the
21 fairness and opportunities in the adminis-
22 tration of this paragraph; and

23 “(ii) an evaluation of—

24 “(I) accessibility; and

1 “(II) expectations and limitations
2 relating to employee conflict of inter-
3 est;

4 “(12) through the working group established
5 under paragraph (6) (in consultation with the Sec-
6 retary and the Technology Transfer Working Group
7 established under section 1001(d) of the Energy Pol-
8 icy Act of 2005 (42 U.S.C. 16391(d))), subject to
9 subsection (c), collect data regarding the technology
10 transfer activities and programs of the Department;

11 “(13) submit the report described in paragraph
12 (10) to Congress and incorporate the findings of
13 that report in the performance evaluation and man-
14 agement plans of each of the National Laboratories;

15 “(14) consolidate resources and reduce bureau-
16 cratic barriers within the Department and become
17 the office responsible for the coordination, planning,
18 monitoring, and implementation of sections 1001,
19 1002, 1003, and 1004 of title X of the Energy Pol-
20 icy Act of 2005 (42 U.S.C. 16391, 16392, 16393,
21 16394), to assist the Department and National Lab-
22 oratories in carrying out technology transfer and
23 small business activities;

24 “(15) administer the Technology Commer-
25 cialization Fund established under section 1001(e)

1 of the Energy Policy Act of 2005 (42 U.S.C.
2 16391(e)), including—

3 “(A) the development of a multiyear plan
4 for the use of the Fund;

5 “(B) the use of the Fund to carry out the
6 duties of the Office;

7 “(C) the coordination with other agencies
8 of the Department on the use of the Fund; and

9 “(D) the submission to Congress of an an-
10 nual report that describes use of the Fund dur-
11 ing the preceding year;

12 “(16) except as otherwise provided in this Act,
13 carry out the research, development, demonstration,
14 and commercial application programs, projects, and
15 activities authorized by this Act in accordance
16 with—

17 “(A) the Atomic Energy Act of 1954 (42
18 U.S.C. 2011 et seq.);

19 “(B) the Federal Nonnuclear Energy Re-
20 search and Development Act of 1974 (42
21 U.S.C. 5901 et seq.);

22 “(C) the Energy Policy Act of 1992 (42
23 U.S.C. 13201 et seq.);

24 “(D) the Stevenson-Wydler Technology In-
25 novation Act of 1980 (15 U.S.C. 3701 et seq.);

1 “(E) chapter 18 of title 35, United States
2 Code (commonly known as the ‘Bayh-Dole
3 Act’); and

4 “(F) any other Act under which the Sec-
5 retary is authorized to carry out the programs,
6 projects, and activities; and

7 “(17) perform such other duties as are deter-
8 mined appropriate by the Secretary.

9 “(c) PROTECTION OF INFORMATION.—The following
10 types of information collected by the Department or Na-
11 tional Laboratories from recipients of financial assistance
12 awards or technology transfer partners (including parties
13 to cooperative research and development agreements or
14 other similar agreements) shall be considered privileged
15 and confidential and shall not be subject to disclosure
16 under section 552 of title 5, United States Code:

17 “(1) Plans for commercialization of technologies
18 developed under an award or agreement, including
19 business plans, technology-to-market plans, market
20 studies, and cost and performance models.

21 “(2) Specific investments provided to the recipi-
22 ent of an award or party to an agreement from third
23 parties (such as venture capital firms, hedge funds,
24 and private equity firms), including the amount of
25 the investment and the percentage of ownership of

1 the award provided in return for the investment, un-
2 less the disclosure is made in an aggregate form that
3 provides anonymity.

4 “(3) Additional financial support that the re-
5 cipient of an award or party to an agreement—

6 “(A) plans to or has invested into the tech-
7 nology developed under the award or agree-
8 ment; or

9 “(B) is seeking from third parties.

10 “(4) Revenue from the licensing or sale of new
11 products or services resulting from research con-
12 ducted under the award or agreement, unless the
13 disclosure is made in an aggregate form that pro-
14 vides anonymity.

15 “(d) RESULTS OF EVALUATION AND ANALYSIS.—

16 “(1) IN GENERAL.—The Secretary shall use the
17 reviews, evaluations, and reports conducted under
18 this section to improve and enhance—

19 “(A) the technology transfer programs and
20 activities of the Department; and

21 “(B) the technology transfer offices of the
22 National Laboratories and the National Nuclear
23 Security Administration to promote the tech-
24 nology transfer goals of the Department.

25 “(2) NATIONAL LABORATORIES.—

1 “(A) IN GENERAL.—The Department shall
2 work with each National Laboratory to incor-
3 porate the evaluation and impact of technology
4 transfer activities in the annual performance
5 evaluation and measurement plan of the Na-
6 tional Laboratory to enable significant progress
7 to be rewarded and limited progress to be im-
8 proved annually.

9 “(B) ADMINISTRATION.—The evaluation
10 process under this paragraph shall—

11 “(i) focus on the performance of each
12 National Laboratory individually; and

13 “(ii) compare the performance of each
14 National Laboratory during the applicable
15 and previous year.

16 “(e) TECHNOLOGY TRANSFER OFFICES.—

17 “(1) IN GENERAL.—Each National Laboratory
18 shall establish or maintain, as applicable, a tech-
19 nology transfer office for the Office.

20 “(2) COORDINATION.—The Office shall connect
21 and coordinate the technology transfer offices estab-
22 lished under this subsection.

23 “(3) DUTIES.—Each technology transfer office
24 shall serve as the regional implementation office for
25 the technology transfer programs of the Depart-

1 ment, including technology commercialization, entre-
2 preneurship, and business development.”.

3 **SEC. 3. T²-CORPS.**

4 Title II of the Department of Energy Organization
5 Act (42 U.S.C. 7131 et seq.) (as amended by section 2)
6 is amended by adding at the end the following:

7 **“SEC. 219. T²-CORPS.**

8 “(a) ESTABLISHMENT.—

9 “(1) IN GENERAL.—The Secretary shall estab-
10 lish a T²-Corps, modeled after the I-Corps of the
11 National Science Foundation, to support invest-
12 ments in entrepreneurs, mentors, and principal in-
13 vestigators.

14 “(2) GOALS.—The goal of the T²-Corps is to
15 invest in technology maturation, market assessment,
16 and increasing industry and small business access to
17 intellectual property and core capabilities of the De-
18 partment and National Laboratories.

19 “(b) TEAMS.—

20 “(1) IN GENERAL.—The Office of Advanced
21 Research, Technology Transfer, and Innovation in
22 Energy (including technology transfer offices of the
23 Office) (referred to in this section as the ‘Office’)
24 shall establish teams composed of—

1 “(A) entrepreneurs who possess relevant
2 technical knowledge and a commitment to in-
3 vestigate the commercial applications of tech-
4 nology innovation;

5 “(B) mentors who are experienced entre-
6 preneurs, with technology, marketing, commer-
7 cialization, or other relevant expertise to assist
8 teams in the development of the team and
9 throughout the learning process in a manner
10 similar to the Senior Corps; and

11 “(C) principal investigators who serve as
12 technical lead and project managers.

13 “(2) COMPETITIVE PROCESS.—Each team shall
14 be selected and assembled through a competitive
15 process.

16 “(3) TECHNOLOGY TRANSFER OFFICE.—

17 “(A) IN GENERAL.—Each team shall be
18 hosted by a technology transfer office.

19 “(B) DUTIES.—The technology transfer
20 office shall monitor and administer participa-
21 tion in the program in accordance with this sec-
22 tion.

23 “(4) DIVERSITY.—The Secretary shall ensure,
24 to the maximum extent practicable, the diversity of
25 teams established under this subsection.

1 “(c) TECHNOLOGY COMMERCIALIZATION CHAL-
2 LENGES.—

3 “(1) IN GENERAL.—The Office may establish
4 and participate in technology commercialization
5 challenges.

6 “(2) ADMINISTRATION.—The Office may use a
7 technology commercialization challenge—

8 “(A) to leverage the core strengths of a
9 National Laboratory and allow the National
10 Laboratory to focus on a specific topic; and

11 “(B) to create collaborative public-private
12 partnerships that address challenges identified
13 by the industry or National Laboratory tech-
14 nology transfer working groups.

15 “(C) SMALL ENTERPRISES.—The Sec-
16 retary and the Administrator of the Small Busi-
17 ness Administration shall ensure that at least
18 80 percent of the businesses participating in the
19 T²-Corps are smaller enterprises (as defined by
20 the Administrator) that are located in diverse
21 regional geographic areas established under sec-
22 tion 220(e)(4).

23 “(d) COORDINATION.—

24 “(1) IN GENERAL.—The Office shall work with
25 National Laboratory technology transfer offices—

1 “(A) to develop information sharing and
2 coordinate resources to enable coordination and
3 competition between members of T²-Corps
4 teams, including a coordination platform that
5 leverage existing elements of social media and
6 networking to connect individuals and teams in
7 the exchange of information and ideas; and

8 “(B) to connect follow on-funding and
9 other resources with successful start-ups
10 through actions such as—

11 “(i) inviting successful teams or
12 projects to participate in an alumni net-
13 work to reinvest in the next generation of
14 start-ups; and

15 “(ii) arranging opportunities for suc-
16 cessful start-ups to connect with programs
17 that are not administered by the Depart-
18 ment or the Small Business Administration
19 to promote the growth of business.

20 “(2) NONPROFIT ENTITIES.—

21 “(A) IN GENERAL.—The Office shall part-
22 ner with foundations and nonprofit entities with
23 similar technology transfer and entrepreneur-
24 ship priorities and goals to assist in carrying
25 out this section.

1 “(B) ACTIVITIES.—The partnerships may
2 be established to carry out—

3 “(i) coordination, planning, and volun-
4 teer activities that do not involve the trans-
5 fer of funding between partners; or

6 “(ii) competitively solicited partner-
7 ship agreements—

8 “(I) to enable foundations and
9 nonprofit entities to apply for funding
10 to assist in carrying out Department
11 activities; or

12 “(II) to provide funding to aug-
13 ment existing Department activities
14 relating specifically to common tech-
15 nology transfer and entrepreneurship
16 priorities and goals.

17 “(e) FUNDING.—The Office may use to carry out this
18 section—

19 “(1) funding made available to carry out—

20 “(A) the Small Business Act (15 U.S.C.
21 631 et seq.); or

22 “(B) section 1001 of the Energy Policy
23 Act of 2005 (42 U.S.C. 16391); and

24 “(2) any other funds that are made available to
25 carry out this section.”.

1 **SEC. 4. TECHNOLOGY TRANSFER INVESTMENT INITIATIVE.**

2 Title II of the Department of Energy Organization
3 Act (42 U.S.C. 7131 et seq.) (as amended by section 3)
4 is amended by adding at the end the following:

5 **“SEC. 220. TECHNOLOGY TRANSFER INVESTMENT INITIA-**
6 **TIVE.**

7 “(a) IN GENERAL.—The Secretary and the Adminis-
8 trator of the Small Business Administration (referred to
9 in this section as the ‘Administrator’) shall jointly estab-
10 lish and carry out a Technology Transfer Investment Ini-
11 tiative (referred to in this section as the ‘Initiative’).

12 “(b) PARTNERSHIP.—To carry out the Initiative, the
13 Secretary shall enter into a memorandum of under-
14 standing with the Administrator to coordinate a partner-
15 ship program carried out by—

16 “(1) the Office of Advanced Research, Tech-
17 nology Transfer, and Innovation established by sec-
18 tion 218; and

19 “(2) the Small Business Investment Company
20 (referred to in this section as ‘SBIC’) Program of
21 the Small Business Administration.

22 “(c) GOAL.—The goal of the partnership program
23 shall be to leverage the strengths of the SBIC program
24 to benefit the T²-Corps teams completing the Department
25 program.

1 “(d) TECHNOLOGY TRANSFER INVESTMENT INITIA-
2 TIVE.—

3 “(1) SELECTION.—The Administrator, in con-
4 sultation with the Secretary, shall solicit SBIC par-
5 ticipation in the technology transfer investment ini-
6 tiative of the Small Business Administration and the
7 Department.

8 “(2) PARTICIPATION.—A SBIC that agrees or
9 is selected to participate in technology transfer in-
10 vestment initiative shall—

11 “(A) regularly review proposals created by
12 T²-Corps teams for possible investment;

13 “(B) assess each proposal against the cri-
14 teria established by the SBIC; and

15 “(C) comply with all provisions of law ap-
16 plicable to the Small Business Administration
17 (including regulations).

18 “(3) REGIONAL GEOGRAPHIC AREAS.—

19 “(A) IN GENERAL.—The Office established
20 under section 218 (including National Labora-
21 tory technology transfer offices), in coordination
22 with T²-Corps established under section 219,
23 shall establish and coordinate regional geo-
24 graphic areas to carry out the Initiative.

1 “(B) LEVERAGE.—The Office (including
2 National Laboratory technology transfer of-
3 fices) and SBICs shall leverage, to the max-
4 imum extent practicable, the experience and ex-
5 pertise of local, State, and regional partners to
6 efficiency and effectively implement the Initia-
7 tive.”.

○