

Suspend the Rules And Pass the Bill, H.R. 1022, with Amendments

(The amendments strike all after the enacting clause and insert a new text and a new title)

113TH CONGRESS
2D SESSION

H. R. 1022

To develop an energy critical elements program, to amend the National Materials and Minerals Policy, Research and Development Act of 1980, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 6, 2013

Mr. SWALWELL of California introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

To develop an energy critical elements program, to amend the National Materials and Minerals Policy, Research and Development Act of 1980, 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,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Securing Energy Crit-
5 ical Elements and American Jobs Act of 2014”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

1 (1) APPROPRIATE CONGRESSIONAL COMMIT-
2 TEES.—The term “appropriate Congressional com-
3 mittees” means the Committee on Science, Space,
4 and Technology of the House of Representatives and
5 the Committee on Commerce, Science, and Trans-
6 portation and the Committee on Energy and Natural
7 Resources of the Senate.

8 (2) CENTER.—The term “Center” means the
9 Critical Materials Information Center established
10 under section 102(b).

11 (3) DEPARTMENT.—The term “Department”
12 means the Department of Energy.

13 (4) ENERGY CRITICAL ELEMENT.—The term
14 “energy critical element” means any of a class of
15 chemical elements that have a high risk of a supply
16 disruption and are critical to one or more new, en-
17 ergy-related technologies such that a shortage of
18 such element would significantly inhibit large-scale
19 deployment of technologies that produce, transmit,
20 store, or conserve energy.

21 (5) HUB.—The term “Hub” means the Critical
22 Materials Energy Innovation Hub authorized in sec-
23 tion 102(a).

24 (6) INSTITUTION OF HIGHER EDUCATION.—The
25 term “institution of higher education” has the

1 meaning given such term in section 101(a) of the
2 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

3 (7) PROGRAM.—The term “program” means
4 the program authorized in section 101(a).

5 (8) SECRETARY.—The term “Secretary” means
6 the Secretary of Energy.

7 **TITLE I—ENERGY CRITICAL** 8 **ELEMENTS**

9 **SEC. 101. ENERGY CRITICAL ELEMENTS PROGRAM.**

10 (a) AUTHORIZATION OF PROGRAM.—

11 (1) IN GENERAL.—There is authorized in the
12 Department a program of research, development,
13 demonstration, and commercial application to assure
14 the long-term, secure, and sustainable supply of en-
15 ergy critical elements sufficient to satisfy the na-
16 tional security, economic well-being, and industrial
17 production needs of the United States. This program
18 may be carried out primarily by the Critical Mate-
19 rials Energy Innovation Hub authorized in section
20 102(a).

21 (2) PROGRAM ACTIVITIES.—The program shall
22 focus on areas that the private sector by itself is not
23 likely to undertake because of technical and financial
24 uncertainty and support activities to—

1 (A) improve methods for the extraction,
2 processing, use, recovery, and recycling of en-
3 ergy critical elements;

4 (B) improve the understanding of the per-
5 formance, processing, and adaptability in engi-
6 neering designs using energy critical elements;

7 (C) identify and test alternative materials
8 that can be substituted for energy critical ele-
9 ments and maintain or exceed current perform-
10 ance; and

11 (D) engineer and test applications that—

12 (i) use recycled energy critical ele-
13 ments;

14 (ii) use alternative materials; or

15 (iii) seek to minimize energy critical
16 element content.

17 (3) EXPANDING PARTICIPATION.—In carrying
18 out the program, the Secretary shall encourage mul-
19 tidisciplinary collaborations of participants, including
20 opportunities for students at institutions of higher
21 education.

22 (4) CONSISTENCY.—The program shall be con-
23 sistent with the policies and programs in the Na-
24 tional Materials and Minerals Policy, Research and
25 Development Act of 1980 (30 U.S.C. 1601 et seq.).

1 (5) INTERNATIONAL COLLABORATION.—In car-
2 rying out the program, the Secretary shall collabo-
3 rate, to the extent practicable, on activities of mu-
4 tual interest with the relevant agencies of foreign
5 countries with interests relating to energy critical
6 elements.

7 (b) PLAN.—

8 (1) IN GENERAL.—Within 180 days after the
9 date of enactment of this Act and biennially there-
10 after, the Secretary shall prepare and submit to the
11 appropriate Congressional committees a plan to
12 carry out the program.

13 (2) SPECIFIC REQUIREMENTS.—The plan re-
14 quired under paragraph (1) shall include a descrip-
15 tion of—

16 (A) the research and development activities
17 to be carried out by the program during the
18 subsequent 2 years;

19 (B) the expected contributions of the pro-
20 gram to the creation of innovative methods and
21 technologies for the efficient and sustainable
22 provision of energy critical elements to the do-
23 mestic economy; and

1 (C) how the program is promoting the
2 broadest possible participation by academic, in-
3 dustrial, and other contributors.

4 (3) CONSULTATION.—In preparing each plan
5 under paragraph (1), the Secretary shall consult
6 with appropriate representatives of industry, institu-
7 tions of higher education, Department of Energy na-
8 tional laboratories, professional and technical soci-
9 eties, other Federal agencies, and other entities, as
10 determined by the Secretary.

11 (c) COORDINATION AND NONDUPLICATION.—To the
12 maximum extent practicable, the Secretary shall ensure
13 that the activities carried out under this title are coordi-
14 nated with, and do not unnecessarily duplicate the efforts
15 of, other programs within the Federal Government.

16 (d) AUTHORIZATION OF APPROPRIATIONS.—

17 (1) IN GENERAL.—There are authorized to be
18 appropriated to the Secretary to carry out this Act
19 the following sums:

20 (A) For fiscal year 2015, \$25,000,000.

21 (B) For fiscal year 2016, \$25,000,000.

22 (C) For fiscal year 2017, \$25,000,000.

23 (D) For fiscal year 2018, \$25,000,000.

24 (E) For fiscal year 2019, \$25,000,000.

1 (2) Availability. Such sums shall remain avail-
2 able until expended.

3 **SEC. 102. CRITICAL MATERIALS ENERGY INNOVATION HUB.**

4 (a) CRITICAL MATERIALS ENERGY INNOVATION
5 HUB.—To carry out the program, the Secretary is author-
6 ized to maintain a Critical Materials Energy Innovation
7 Hub.

8 (b) CRITICAL MATERIALS INFORMATION CENTER.—

9 (1) IN GENERAL.—To collect, catalogue, dis-
10 seminate, and archive information on energy critical
11 elements, the Hub shall establish and maintain a
12 Critical Materials Information Center.

13 (2) CENTER ACTIVITIES.—

14 (A) In general. The Center shall—

15 (i) serve as the repository for sci-
16 entific and technical data generated by the
17 research and development activities funded
18 under this section;

19 (ii) assist scientists and engineers in
20 making the fullest possible use of the Cen-
21 ter's data holdings;

22 (iii) seek and incorporate other infor-
23 mation on energy critical elements to en-
24 hance the Center's utility for program par-
25 ticipants and other users;

1 (iv) provide advice to the Secretary
2 concerning the program; and

3 (v) host conferences, at least annually,
4 for participants in the program and other
5 interested parties to promote information
6 sharing and encourage new collaborative
7 activities.

8 (B) RESTRICTION.—Not more than 2.5
9 percent of the amounts made available pursuant
10 to this section may be used for hosting con-
11 ferences under subparagraph (A)(v).

12 (c) REVIEW AND REPORT TO CONGRESS.—An award
13 made to operate the Hub shall be for a period not to ex-
14 ceed 5 years, after which the award may be renewed, sub-
15 ject to a rigorous merit review. A Hub already in existence
16 on the date of enactment of this Act may continue to re-
17 ceive support for a period of 5 years beginning on the date
18 of establishment of that Hub. Following this process, if
19 the Secretary determines that award renewal for the Hub
20 is justified, then the Secretary must submit a report to
21 the appropriate Congressional committees at least 30 days
22 prior to the award renewal which explains the Secretary's
23 determination and describes the Department's review
24 process.

1 (d) PROHIBITION ON CONSTRUCTION.—No funds
2 provided pursuant to this section may be used for con-
3 struction of new buildings or facilities for the Hub. Con-
4 struction of new buildings or facilities shall not be consid-
5 ered as part of the non-Federal share of a Hub
6 costsharing agreement.

7 **SEC. 103. SUPPLY OF ENERGY CRITICAL ELEMENTS.**

8 The President, acting through the Critical Material
9 Supply Chain Subcommittee of the Committee on Envi-
10 ronment, Natural Resources, and Sustainability of the Na-
11 tional Science and Technology Council, shall—

12 (1) coordinate the actions of applicable Federal
13 agencies to promote an adequate and stable supply
14 of energy critical elements necessary to maintain na-
15 tional security, economic well-being, and industrial
16 production with appropriate attention to a long-term
17 balance between resource production, energy use, a
18 healthy environment, natural resources conservation,
19 and social needs;

20 (2) identify energy critical elements and estab-
21 lish early warning systems for supply problems of
22 energy critical elements;

23 (3) establish a mechanism for the coordination
24 and evaluation of Federal programs with energy crit-
25 ical element needs, including Federal programs in-

1 volving research and development, in a manner that
2 complements related efforts carried out by the pri-
3 vate sector and other domestic and international
4 agencies and organizations;

5 (4) promote and encourage private enterprise in
6 the development of an economically sound and stable
7 domestic energy critical elements supply chain;

8 (5) promote and encourage the recycling of en-
9 ergy critical elements, taking into account the logis-
10 tics, economic viability, environmental sustainability,
11 and research and development needs for completing
12 the recycling process;

13 (6) assess the need for and make recommenda-
14 tions concerning the availability and adequacy of the
15 supply of technically trained personnel necessary for
16 energy critical elements research, development, ex-
17 traction, and industrial production, with a particular
18 focus on the problem of attracting and maintaining
19 high quality professionals for maintaining an ade-
20 quate supply of energy critical elements; and

21 (7) report to the appropriate Congressional
22 committees on activities and findings under this sec-
23 tion.

1 **TITLE II—NATIONAL MATERIALS**
2 **AND MINERALS POLICY, RE-**
3 **SEARCH, AND DEVELOPMENT**

4 **SEC. 201. AMENDMENTS TO NATIONAL MATERIALS AND**
5 **MINERALS POLICY, RESEARCH AND DEVEL-**
6 **OPMENT ACT OF 1980.**

7 (a) PROGRAM PLAN.—Section 5 of the National Ma-
8 terials and Minerals Policy, Research and Development
9 Act of 1980 (30 U.S.C. 1604) is amended—

10 (1) by striking “date of enactment of this Act”
11 each place it appears and inserting “date of enact-
12 ment of the Securing Energy Critical Elements and
13 American Jobs Act of 2014”;

14 (2) in subsection (b)(1), by striking “Federal
15 Coordinating Council for Science, Engineering, and
16 Technology” and inserting “National Science and
17 Technology Council”;

18 (3) in subsection (c)—

19 (A) by striking “the Federal Emergency”
20 and all that follows through “Agency, and”;

21 (B) by striking “appropriate shall” and in-
22 serting “appropriate, shall”;

23 (C) by striking paragraph (1);

1 (D) in paragraph (2), by striking “in the
2 case” and all that follows through “sub-
3 section,”;

4 (E) by redesignating paragraph (2) as
5 paragraph (1);

6 (F) by redesignating paragraph (3) as
7 paragraph (2); and

8 (G) by amending paragraph (2), as redes-
9 ignated, to read as follows:

10 “(2) assess the adequacy and stability of the
11 supply of materials necessary to maintain national
12 security, economic well-being, and industrial produc-
13 tion.”;

14 (4) by striking subsection (d); and

15 (5) by redesignating subsections (e) and (f) as
16 subsections (d) and (e), respectively.

17 (b) POLICY.—Section 3 of such Act (30 U.S.C. 1602)
18 is amended—

19 (1) by striking “The Congress declares that it”
20 and inserting “It”; and

21 (2) by striking “The Congress further declares
22 that implementation” and inserting “Implementa-
23 tion”.

1 (c) IMPLEMENTATION.—The matter before para-
2 graph (1) of section 4 of such Act (30 U.S.C. 1603) is
3 amended

4 (1) by striking “For the purpose” and all that
5 follows through “declares that the” and inserting
6 “The”; and

7 (2) by striking “departments and agencies,”
8 and inserting “departments and agencies to imple-
9 ment the policies set forth in section 3”.

10 **SEC. 202. REPEAL.**

11 The National Critical Materials Act of 1984 (30
12 U.S.C. 1801 et seq.) is repealed.

Amend the title so as to read: “A bill to authorize
an energy critical elements program, to amend the Na-
tional Materials and Minerals Policy, Research and De-
velopment Act of 1980, and for other purposes.”.