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

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

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

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

(5) HUB.—The term “Hub” means the Critical
Materials Energy Innovation Hub authorized in sec-

tion 102(a).

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

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

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

TITLE I—ENERGY CRITICAL ELEMENTS

SEC. 101. ENERGY CRITICAL ELEMENTS PROGRAM.

(a) AUTHORIZATION OF PROGRAM.—

(1) IN GENERAL.—There is authorized in the Department a program of research, development, demonstration, and commercial application to assure the long-term, secure, and sustainable supply of energy critical elements sufficient to satisfy the national security, economic well-being, and industrial production needs of the United States. This program may be carried out primarily by the Critical Materials Energy Innovation Hub authorized in section 102(a).

(2) PROGRAM ACTIVITIES.—The program shall focus on areas that the private sector by itself is not likely to undertake because of technical and financial uncertainty and support activities to—
(A) improve methods for the extraction, processing, use, recovery, and recycling of energy critical elements;

(B) improve the understanding of the performance, processing, and adaptability in engineering designs using energy critical elements;

(C) identify and test alternative materials that can be substituted for energy critical elements and maintain or exceed current performance; and

(D) engineer and test applications that—

(i) use recycled energy critical elements;

(ii) use alternative materials; or

(iii) seek to minimize energy critical element content.

(3) EXPANDING PARTICIPATION.—In carrying out the program, the Secretary shall encourage multidisciplinary collaborations of participants, including opportunities for students at institutions of higher education.

(4) CONSISTENCY.—The program shall be consistent with the policies and programs in the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1601 et seq.).
(5) **INTERNATIONAL COLLABORATION.**—In carrying out the program, the Secretary shall collaborate, to the extent practicable, on activities of mutual interest with the relevant agencies of foreign countries with interests relating to energy critical elements.

(b) **PLAN.**—

(1) **IN GENERAL.**—Within 180 days after the date of enactment of this Act and biennially thereafter, the Secretary shall prepare and submit to the appropriate Congressional committees a plan to carry out the program.

(2) **SPECIFIC REQUIREMENTS.**—The plan required under paragraph (1) shall include a description of—

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

(B) the expected contributions of the program to the creation of innovative methods and technologies for the efficient and sustainable provision of energy critical elements to the domestic economy; and
(C) how the program is promoting the broadest possible participation by academic, industrial, and other contributors.

(3) CONSULTATION.—In preparing each plan under paragraph (1), the Secretary shall consult with appropriate representatives of industry, institutions of higher education, Department of Energy national laboratories, professional and technical societies, other Federal agencies, and other entities, as determined by the Secretary.

(c) COORDINATION AND NONDUPlication.—To the maximum extent practicable, the Secretary shall ensure that the activities carried out under this title are coordinated with, and do not unnecessarily duplicate the efforts of, other programs within the Federal Government.

(d) AUTHORIZATION OF APPROPRIATIONS.—

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

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

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

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

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

(E) For fiscal year 2019, $25,000,000.
(2) Availability. Such sums shall remain available until expended.

SEC. 102. CRITICAL MATERIALS ENERGY INNOVATION HUB.

(a) Critical Materials Energy Innovation Hub.—To carry out the program, the Secretary is authorized to maintain a Critical Materials Energy Innovation Hub.

(b) Critical Materials Information Center.—

(1) In general.—To collect, catalogue, disseminate, and archive information on energy critical elements, the Hub shall establish and maintain a Critical Materials Information Center.

(2) Center activities.—

(A) In general. The Center shall—

(i) serve as the repository for scientific and technical data generated by the research and development activities funded under this section;

(ii) assist scientists and engineers in making the fullest possible use of the Center’s data holdings;

(iii) seek and incorporate other information on energy critical elements to enhance the Center’s utility for program participants and other users;
(iv) provide advice to the Secretary concerning the program; and
(v) host conferences, at least annually, for participants in the program and other interested parties to promote information sharing and encourage new collaborative activities.

(B) Restriction.—Not more than 2.5 percent of the amounts made available pursuant to this section may be used for hosting conferences under subparagraph (A)(v).

(c) Review and Report to Congress.—An award made to operate the Hub shall be for a period not to exceed 5 years, after which the award may be renewed, subject to a rigorous merit review. A Hub already in existence on the date of enactment of this Act may continue to receive support for a period of 5 years beginning on the date of establishment of that Hub. Following this process, if the Secretary determines that award renewal for the Hub is justified, then the Secretary must submit a report to the appropriate Congressional committees at least 30 days prior to the award renewal which explains the Secretary’s determination and describes the Department’s review process.
(d) Prohibition on Construction.—No funds provided pursuant to this section may be used for construction of new buildings or facilities for the Hub. Construction of new buildings or facilities shall not be considered as part of the non-Federal share of a Hub costsharing agreement.

SEC. 103. SUPPLY OF ENERGY CRITICAL ELEMENTS.

The President, acting through the Critical Material Supply Chain Subcommittee of the Committee on Environment, Natural Resources, and Sustainability of the National Science and Technology Council, shall—

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

(2) identify energy critical elements and establish early warning systems for supply problems of energy critical elements;

(3) establish a mechanism for the coordination and evaluation of Federal programs with energy critical element needs, including Federal programs in-
volving research and development, in a manner that complements related efforts carried out by the private sector and other domestic and international agencies and organizations;

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

(5) promote and encourage the recycling of energy critical elements, taking into account the logistics, economic viability, environmental sustainability, and research and development needs for completing the recycling process;

(6) assess the need for and make recommendations concerning the availability and adequacy of the supply of technically trained personnel necessary for energy critical elements research, development, extraction, and industrial production, with a particular focus on the problem of attracting and maintaining high quality professionals for maintaining an adequate supply of energy critical elements; and

(7) report to the appropriate Congressional committees on activities and findings under this section.
TITLE II—NATIONAL MATERIALS AND MINERALS POLICY, RESEARCH, AND DEVELOPMENT

SEC. 201. AMENDMENTS TO NATIONAL MATERIALS AND MINERALS POLICY, RESEARCH AND DEVELOPMENT ACT OF 1980.

(a) PROGRAM PLAN.—Section 5 of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1604) is amended—

(1) by striking “date of enactment of this Act” each place it appears and inserting “date of enactment of the Securing Energy Critical Elements and American Jobs Act of 2014”;

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

(3) in subsection (c)—

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

(B) by striking “appropriate shall” and inserting “appropriate, shall”;

(C) by striking paragraph (1);
(D) in paragraph (2), by striking “in the case” and all that follows through “subsection,”;

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

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

(G) by amending paragraph (2), as redesignated, to read as follows:

“(2) assess the adequacy and stability of the supply of materials necessary to maintain national security, economic well-being, and industrial production.”;

(4) by striking subsection (d); and

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

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

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

(2) by striking “The Congress further declares that implementation” and inserting “Implementation”.
(c) IMPLEMENTATION.—The matter before paragraph (1) of section 4 of such Act (30 U.S.C. 1603) is amended

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

(2) by striking “departments and agencies,” and inserting “departments and agencies to implement the policies set forth in section 3”.

SEC. 202. REPEAL.


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