

Udall-1 (modified)

AEG16305

S.L.C.



AMENDMENT NO. _____ Calendar No. _____

Purpose: To provide for Federal coordination of chemistry research and development.

IN THE SENATE OF THE UNITED STATES—114th Cong., 2d Sess.

S. 3084

To invest in innovation through research and development, and to improve the competitiveness of the United States.

Referred to the Committee on _____ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT intended to be proposed by Mr. UDALL to the amendment (No. _____) proposed by _____

Viz:

1 On page 53, between lines 3 and 4, insert the following:
2

3 **SEC. 115. FEDERAL COORDINATION OF SUSTAINABLE**
4 **CHEMISTRY RESEARCH AND DEVELOPMENT.**

5 (a) IMPORTANCE OF SUSTAINABLE CHEMISTRY.—It
6 is the sense of Congress that—

7 (1) the science of chemistry is vital to improv-
8 ing the quality of human life and plays an important
9 role in addressing critical global challenges, includ-
10 ing water quality, energy, health care, and agri-
11 culture;

1 (2) sustainable chemistry can reduce risk to
2 human health and the environment, reduce waste
3 and improve pollution prevention, promote safe and
4 efficient manufacturing, and promote efficient use of
5 resources in developing new materials, processes,
6 and technologies that support viable long-term solu-
7 tions;

8 (3) sustainable chemistry can stimulate innova-
9 tion, encourage new and creative approaches to
10 problems, create jobs, and save money; and

11 (4) a coordinated national effort on sustainable
12 chemistry will allow for a greater return on Federal
13 research investment in this space.

14 (b) NATIONAL COORDINATION FOR SUSTAINABLE
15 CHEMISTRY.—

16 (1) ESTABLISHMENT.—Not later than 180 days
17 after the date of enactment of this Act, the Director
18 of the Office of Science and Technology Policy shall
19 convene an entity under the National Science and
20 Technology Council with the responsibility to coordi-
21 nate Federal programs and activities in support of
22 sustainable chemistry, including, as appropriate, at
23 the National Science Foundation, the Department of
24 Energy, the Department of Agriculture, the Envi-
25 ronmental Protection Agency, the National Institute

1 of Standards and Technology, the Department of
2 Defense, the National Institutes of Health, and
3 other related Federal agencies.

4 (2) CILAIRS.—The entity described in para-
5 graph (1) shall be chaired by representatives from
6 the National Science Foundation, the Environmental
7 Protection Agency, or other agencies, as appropriate.

8 (3) DUTIES.—

9 (A) IN GENERAL.—The entity described in
10 paragraph (1) shall—

11 (i) develop a working definition of sus-
12 tainable chemistry, after seeking advice
13 and input from stakeholders as described
14 in clause (iv);

15 (ii) coordinate and support existing
16 Federal research, development, education,
17 and training efforts in sustainable chem-
18 istry;

19 (iii) develop a strategic plan to guide
20 Federal programs and activities in support
21 of sustainable chemistry research, develop-
22 ment, technology transfer, education, and
23 training as described in subsection (c), in-
24 cluding support for public-private partner-
25 ships; and

1 (iv) as appropriate, consult and co-
2 ordinate with stakeholders qualified to pro-
3 vide advice and information on the develop-
4 ment of the definition of sustainable chem-
5 istry and the strategic plan.

6 (B) STAKEHOLDERS.—In choosing the
7 stakeholders described in subparagraph (A)(iv),
8 the entity described in paragraph (1) is strongly
9 encouraged to include representatives from—

10 (i) industry (including small- and me-
11 dium-sized enterprises from across the
12 value chain);

13 (ii) the scientific community (includ-
14 ing the National Academy of Sciences, sci-
15 entific professional societies, and aca-
16 demia);

17 (iii) the defense community;

18 (iv) State, tribal, and local govern-
19 ments;

20 (v) State or regional sustainable
21 chemistry programs;

22 (vi) non-governmental organizations;

23 and

24 (vii) other appropriate organizations.

25 (c) STRATEGIC PLAN.—

1 (1) IN GENERAL.—Not later than 1 year after
2 the date of enactment of this Act, the entity de-
3 scribed in subsection (b)(1) shall submit to the Com-
4 mittee on Science, Space, and Technology and the
5 Committee on Energy and Commerce of the House
6 of Representatives and the Committee on Environ-
7 ment and Public Works and the Committee on Com-
8 merce, Science, and Transportation of the Senate, a
9 5-year strategic plan that shall include—

10 (A) a summary of Federally funded sus-
11 tainable chemistry research, development, dem-
12 onstration, technology transfer, commercializa-
13 tion, education, and training activities;

14 (B) a summary of the financial resources
15 allocated to sustainable chemistry activities;

16 (C) an evaluation of best practices and co-
17 ordination among participating agencies; and

18 (D) a framework for advancing sustainable
19 chemistry, including strategies for and benefits
20 of Federal support for—

21 (i) sustainable chemistry research and
22 development conducted at Federal and na-
23 tional laboratories, Federal agencies, and
24 public and private institutions of higher
25 education;

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1 (ii) technology transfer and commer-
2 cialization of sustainable chemistry, includ-
3 ing incentives and impediments to develop-
4 ment of sustainable chemicals, best prac-
5 tices, and costs and benefits;

6 (iii) education and training of under-
7 graduate and graduate students and pro-
8 fessional scientists and engineers, including
9 through partnerships with industry, in sus-
10 tainable chemistry science and engineering;

11 (iv) economic, legal, and other appro-
12 priate social science research to identify
13 barriers to commercialization and methods
14 to advance commercialization of sustain-
15 able chemistry; and

16 (v) public-private partnerships in sup-
17 port of sustainable chemistry research, de-
18 velopment, education, and training.

19 (2) SUBMISSION TO GAO.—The entity described
20 in subsection (b)(1) shall submit the strategic plan
21 described in paragraph (1) to the Government Ac-
22 countability Office for consideration in future Con-
23 gressional inquiries.

24 (d) SUSTAINABLE CHEMISTRY BASIC RESEARCH.—
25 Subject to the availability of appropriated funds, the Di-

1 rector of the National Science Foundation shall continue
2 to carry out the Sustainable Chemistry Basic Research
3 program authorized under section 509 of the National
4 Science Foundation Authorization Act of 2010 (42 U.S.C.
5 1862p-3).