

118TH CONGRESS
1ST SESSION

H. R. 1713

To provide for Department of Energy and Department of Agriculture joint research and development activities, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 22, 2023

Mr. LUCAS (for himself and Ms. LOFGREN) introduced the following bill; which was referred to the Committee on Science, Space, and Technology, and in addition to the Committee on Agriculture, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To provide for Department of Energy and Department of Agriculture joint research and development activities, 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 “DOE and USDA Inter-
5 agency Research Act”.

1 **SEC. 2. DEPARTMENT OF ENERGY AND DEPARTMENT OF**
2 **AGRICULTURE JOINT RESEARCH AND DEVEL-**
3 **OPMENT ACTIVITIES.**

4 (a) IN GENERAL.—The Secretary of Energy and the
5 Secretary of Agriculture (in this section referred to as the
6 “Secretaries”) shall carry out cross-cutting and collabo-
7 rative research and development activities focused on the
8 joint advancement of Department of Energy and Depart-
9 ment of Agriculture mission requirements and priorities.

10 (b) MEMORANDUM OF UNDERSTANDING.—The Sec-
11 retaries shall carry out and coordinate the activities under
12 subsection (a) through the establishment of a memo-
13 randum of understanding, or other appropriate inter-
14 agency agreement. Such memorandum or agreement shall
15 require the use of a competitive, merit-reviewed process,
16 which considers applications from Federal agencies, Na-
17 tional Laboratories, institutions of higher education, non-
18 profit institutions, and other appropriate entities.

19 (c) COORDINATION.—In carrying out the activities
20 under subsection (a), the Secretaries may—

21 (1) conduct collaborative research over a variety
22 of focus areas, such as—

23 (A) modeling and simulation, machine
24 learning, artificial intelligence, data assimila-
25 tion, large scale data analytics, and predictive
26 analysis in order to optimize algorithms for

1 purposes related to agriculture and energy,
2 such as life cycle analysis of agricultural or en-
3 ergy systems;

4 (B) fundamental agricultural, biological,
5 computational, and environmental science and
6 engineering, including advanced crop science,
7 crop protection, and breeding, including in col-
8 laboration with the program authorized under
9 section 306 of the Department of Energy Re-
10 search and Innovation Act (42 U.S.C. 18644);

11 (C) integrated natural resources and the
12 energy-water nexus, including in collaboration
13 with the program authorized under section
14 1010 of the Energy Act of 2020 (enacted as di-
15 vision Z of the Consolidated Appropriations
16 Act, 2021 (42 U.S.C. 16183));

17 (D) advanced biomass, biobased products,
18 and biofuels, including in collaboration with the
19 activities authorized under section 9008(b) of
20 the Farm Security and Rural Investment Act of
21 2002 (7 U.S.C. 8108(b));

22 (E) diverse feedstocks for economically and
23 environmentally sustainable fuels, including
24 aviation and naval fuels;

1 (F) colocation of agricultural resources and
2 activities and ecosystem services with diverse
3 energy technologies and resources, such as geo-
4 thermal energy, nuclear energy, solar energy,
5 wind energy, natural gas, hydropower, and en-
6 ergy storage;

7 (G) colocation of agricultural resources
8 and activities with carbon storage and utiliza-
9 tion technologies;

10 (H) invasive species management to fur-
11 ther the work done by the Federal Interagency
12 Committee for the Management of Noxious and
13 Exotic Weeds;

14 (I) long-term and high-risk technological
15 barriers in the development of transformative
16 science and technology solutions in the agri-
17 culture and energy sectors, including in collabo-
18 ration with the program authorized under sec-
19 tion 5012 of the America COMPETES Act (42
20 U.S.C. 16538);

21 (J) grid modernization and grid security;
22 and

23 (K) rural technology development, includ-
24 ing manufacturing, precision agriculture tech-

1 nologies, and mechanization and automation
2 technologies;

3 (2) develop methods to accommodate large vol-
4 untary standardized and integrated data sets on ag-
5 ricultural, environmental, supply chain, and eco-
6 nomic information with variable accuracy and scale;

7 (3) promote collaboration, open community-
8 based development, and data and information shar-
9 ing between Federal agencies, National Labora-
10 tories, institutions of higher education, nonprofit in-
11 stitutions, industry partners, and other appropriate
12 entities by providing reliable access to secure data
13 and information that are in compliance with Federal
14 rules and regulations;

15 (4) support research infrastructure and work-
16 force development as the Secretaries determine nec-
17 essary; and

18 (5) conduct collaborative research, development,
19 and demonstration of methods and technologies to—

20 (A) improve the efficiency of agriculture
21 operations and processing of agricultural prod-
22 ucts; and

23 (B) reduce greenhouse gas emissions asso-
24 ciated with such operations and such proc-
25 essing.

1 (d) AGREEMENTS.—In carrying out the activities
2 under subsection (a), the Secretaries are authorized to—

3 (1) carry out reimbursable agreements between
4 the Department of Energy, the Department of Agri-
5 culture, and other entities in order to maximize the
6 effectiveness of research and development; and

7 (2) collaborate with other Federal agencies as
8 appropriate.

9 (e) REPORT.—Not later than two years after the date
10 of the enactment of this Act, the Secretaries shall submit
11 to the Committee on Science, Space, and Technology and
12 the Committee on Agriculture of the House of Representa-
13 tives, and the Committee on Energy and Natural Re-
14 sources and the Committee on Agriculture, Nutrition, and
15 Forestry of the Senate, a report detailing the following:

16 (1) Interagency coordination between each Fed-
17 eral agency involved in the research and development
18 activities carried out under this section.

19 (2) Potential opportunities to expand the tech-
20 nical capabilities of the Department of Energy and
21 the Department of Agriculture.

22 (3) Collaborative research achievements.

23 (4) Areas of future mutually beneficial suc-
24 cesses.

1 (5) Continuation of coordination activities be-
2 tween the Department of Energy and the Depart-
3 ment of Agriculture.

4 (f) RESEARCH SECURITY.—The activities authorized
5 under this section shall be applied in a manner consistent
6 with subtitle D of title VI of the Research and Develop-
7 ment, Competition, and Innovation Act (enacted as divi-
8 sion B of the CHIPS Act of 2022 (Public Law 117–167;
9 42 U.S.C. 19231 et seq.)).

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