H. R. ______

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

IN THE HOUSE OF REPRESENTATIVES

M. ______ introduced the following bill; which was referred to the Committee on ____________________

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 Representatives of the United States of America in Congress assembled,

2 SECTION 1. SHORT TITLE.

3 This Act may be cited as the “[To Be Supplied] Act”.

4 5
SEC. 2. DEPARTMENT OF ENERGY AND DEPARTMENT OF AGRICULTURE JOINT RESEARCH AND DEVELOPMENT ACTIVITIES.

(a) IN GENERAL.—The Secretary of Energy and the Secretary of Agriculture (in this section referred to as the “Secretaries”) shall carry out cross-cutting and collaborative research and development activities focused on the joint advancement of Department of Energy and Department of Agriculture mission requirements and priorities.

(b) MEMORANDUM OF UNDERSTANDING.—The Secretaries shall carry out and coordinate the activities under subsection (a) through the establishment of a memorandum of understanding, or other appropriate interagency agreement. Such memorandum or agreement shall require the use of a competitive, merit-reviewed process, which considers applications from Federal agencies, National Laboratories, institutions of higher education, non-profit institutions, and other appropriate entities.

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

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

(A) modeling and simulation, machine learning, artificial intelligence, data assimilation, large scale data analytics, and predictive analysis in order to optimize algorithms for
purposes related to agriculture and energy,
such as life cycle analysis of agricultural or en-
ergy systems;

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

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

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

(E) diverse feedstocks for economically and
environmentally sustainable fuels, including
aviation and naval fuels;
(F) colocation of agricultural resources and activities and ecosystem services with diverse energy technologies and resources, such as geothermal energy, nuclear energy, solar energy, wind energy, natural gas, hydropower, and energy storage;

(G) colocation of agricultural resources and activities with carbon storage and utilization technologies;

(H) invasive species management to further the work done by the Federal Interagency Committee for the Management of Noxious and Exotic Weeds;

(I) long-term and high-risk technological barriers in the development of transformative science and technology solutions in the agriculture and energy sectors, including in collaboration with the program authorized under section 5012 of the America COMPETES Act (42 U.S.C. 16538);

(J) grid modernization and grid security;

and

(K) rural technology development, including manufacturing, precision agriculture tech-
nologies, and mechanization and automation technologies;

(2) develop methods to accommodate large voluntary standardized and integrated data sets on agricultural, environmental, supply chain, and economic information with variable accuracy and scale;

(3) promote collaboration, open community-based development, and data and information sharing between Federal agencies, National Laboratories, institutions of higher education, nonprofit institutions, industry partners, and other appropriate entities by providing reliable access to secure data and information that are in compliance with Federal rules and regulations; and

(4) support research infrastructure and workforce development as the Secretary and Administrator determine necessary

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

(1) carry out reimbursable agreements between the Department of Energy, the Department of Agriculture, and other entities in order to maximize the effectiveness of research and development; and

(2) collaborate with other Federal agencies as appropriate.
(e) REPORT.—Not later than two years after the date of the enactment of this Act, the Secretaries shall submit to the Committee on Science, Space, and Technology and the Committee on Agriculture of the House of Representatives, and the Committee on Energy and Natural Resources and the Committee on Agriculture, Nutrition, and Forestry of the Senate, a report detailing the following:

(1) Interagency coordination between each Federal agency involved in the research and development activities carried out under this section.

(2) Potential opportunities to expand the technical capabilities of the Department of Energy and the Department of Agriculture.

(3) Collaborative research achievements.

(4) Areas of future mutually beneficial successes.

(5) Continuation of coordination activities between the Department of Energy and the Department of Agriculture.

(f) RESEARCH SECURITY.—The activities authorized under this section shall be applied in a manner consistent with subtitle D of title VI of the Research and Development, Competition, and Innovation Act (enacted as division B of the CHIPS Act of 2022 (Public Law 117–167; 42 U.S.C. 19231 et seq.)).