

119TH CONGRESS
2D SESSION

H. R. 7936

To amend the Energy Policy Act of 2005 to support the development, demonstration, and commercial application of biotechnology products to increase energy resiliency, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 16, 2026

Mr. BAIRD (for himself, Ms. HOULAHAN, Mrs. BICE, and Mr. KHANNA) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

To amend the Energy Policy Act of 2005 to support the development, demonstration, and commercial application of biotechnology products to increase energy resiliency, 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 “Bioindustrial Scale-
5 Up for Supply Chains and Energy Resiliency Act of
6 2026”.

7 **SEC. 2. SENSE OF CONGRESS.**

8 It is the sense of Congress that—

1 (1) the biggest roadblock for United States bio-
2 technology innovators to commercialization is prov-
3 ing that their products and processes can scale, thus
4 showing investors a path to financial return;

5 (2) the United States faces several main chal-
6 lenges to securing the broad range of infrastructure
7 needed for the breadth of products that bio-
8 technology can make, which are that—

9 (A) the United States lacks sufficient bio-
10 manufacturing capacity, including because re-
11 searchers are generating new products faster
12 than manufacturing capacity is increasing and
13 building new facilities is expensive and time-
14 consuming; and

15 (B) biomanufacturing technologies of the
16 future have yet to mature into routine commer-
17 cial applications, as current biomanufacturing
18 facilities are generally optimized for 1 type of
19 product and are usually not compatible with
20 other products; and

21 (3) to position the United States as a leader in
22 bioindustrial innovation and enable participation in
23 groundbreaking projects through state-of-the-art in-
24 frastructure, it is critical to establish technology

1 maturation facilities to provide world-class capabili-
2 ties.

3 **SEC. 3. BIOINDUSTRIAL SCALE-UP FOR SUPPLY CHAINS**
4 **AND ENERGY RESILIENCY.**

5 Section 932 of the Energy Policy Act of 2005 (42
6 U.S.C. 16232) is amended—

7 (1) in subsection (a)—

8 (A) by redesignating paragraphs (1) and
9 (2) as paragraphs (5) and (7), respectively;

10 (B) by inserting before paragraph (5) (as
11 so redesignated) the following:

12 “(1) BIOBASED PRODUCT.—The term ‘biobased
13 product’ has the meaning given the term in section
14 9001 of the Farm Security and Rural Investment
15 Act of 2002 (7 U.S.C. 8101).

16 “(2) BIOINDUSTRIAL MANUFACTURING.—The
17 term ‘bioindustrial manufacturing’ means the use of
18 living organisms, cells, tissues, enzymes, or cell-free
19 systems to produce materials and products for non-
20 pharmaceutical applications.

21 “(3) BIOINTERMEDIATE.—The term ‘biointer-
22 mediate’ means an intermediate product that is de-
23 rived from biomass or waste streams, including car-
24 bon oxides.

1 “(4) BIOMANUFACTURING.—The term ‘bio-
2 manufacturing’ means the use of biological systems
3 to produce goods and services at commercial scale.”;

4 (C) by inserting after paragraph (5) (as so
5 redesignated) the following:

6 “(6) BIOTECHNOLOGY.—The term ‘bio-
7 technology’ means technology that applies to or is
8 enabled by life sciences innovation or product devel-
9 opment.”; and

10 (D) by inserting after paragraph (7) (as so
11 redesignated) the following:

12 “(8) OPEN ACCESS.—The term ‘open access’,
13 with respect to infrastructure, data, or research re-
14 sources, means that those resources are—

15 “(A) available without licensing or intellec-
16 tual property barriers; and

17 “(B) accessible to public and private enti-
18 ties on an equitable basis.

19 “(9) PHYTOBIOME.—The term ‘phytobiome’
20 means a network of interactions of plants, their as-
21 sociated communities of organisms, and their envi-
22 ronmental context.

23 “(10) TECHNOLOGY MATURATION.—The term
24 ‘technology maturation’ means the development,
25 testing, and scaling of technologies to a level of

1 readiness suitable for commercialization or integra-
2 tion into industrial processes, including activities
3 such as prototyping, pilot-scale testing and dem-
4 onstration, and early-stage manufacturing and mar-
5 ket entry.

6 “(11) WASTE STREAM.—The term ‘waste
7 stream’ includes municipal solid waste, food waste,
8 urban wood waste, food processing and fermentation
9 waste, sewage, biogas, industrial waste gases, carbon
10 oxides, atmospheric oxides, and waste gases that are
11 effluents or byproduct streams from various societal
12 pursuits that are targeted toward disposal, dis-
13 charge, or burning.”; and

14 (2) by inserting after subsection (e) the fol-
15 lowing:

16 “(f) BIOINDUSTRIAL TECHNOLOGY MATURATION FA-
17 CILITIES.—

18 “(1) IN GENERAL.—Not later than September
19 30, 2030, the Secretary shall establish not fewer
20 than 2 bioindustrial technology maturation facilities
21 (referred to in this subsection as ‘covered facili-
22 ties’)—

23 “(A) to conduct research, development,
24 demonstration, and commercial application to
25 derisk product and process technologies for bio-

1 technology-based products relevant to the mis-
2 sion of the Department;

3 “(B) that are precommercial; and

4 “(C) that shall operate as user facilities
5 available to governmental and nongovernmental
6 users.

7 “(2) CONSIDERATIONS.—In determining the
8 number, type, and location of covered facilities to es-
9 tablish, the Secretary shall—

10 “(A) consider—

11 “(i) the greatest needs of industry
12 and the gaps in current types of infra-
13 structure;

14 “(ii) unique capabilities that are cur-
15 rently not available anywhere in the world;

16 “(iii) how the covered facilities may—

17 “(I) complement current infra-
18 structure and capabilities, including
19 infrastructure and capabilities of—

20 “(aa) the Department, in-
21 cluding National Laboratories;

22 “(bb) the Department of
23 Defense;

24 “(cc) the Department of
25 Commerce; and

1 “(dd) other covered facili-
2 ties; and

3 “(II) increase production levels
4 by functioning as a connected net-
5 work, including by ensuring that
6 available fermentation capacity, in-
7 cluding of covered facilities and facili-
8 ties of the Department, covers the full
9 range needed for precommercial scale-
10 up; and

11 “(iv) how each covered facility aligns
12 with regional and local workforce needs,
13 pre-existing capabilities, the skills required
14 for the proposed biomanufacturing oper-
15 ations, and the potential for regional and
16 local workforce development and job cre-
17 ation; and

18 “(B) ensure that—

19 “(i) covered facilities are in geographi-
20 cally diverse locations—

21 “(I) to maximize access to bio-
22 logical material needed as an input to
23 bioindustrial manufacturing processes;

1 “(II) to leverage available indus-
2 trial and academic expertise, including
3 workforce and human capital; and

4 “(III) to leverage relevant domes-
5 tic infrastructure required to secure
6 supply chains for chemicals and other
7 materials;

8 “(ii) covered facilities are complemen-
9 tary to each other and any other existing
10 related facilities; and

11 “(iii) the first covered facility is
12 planned and built within a 2-year time pe-
13 riod, and the plan for the second and each
14 subsequent facility is developed while con-
15 struction occurs on the earlier planned cov-
16 ered facility.

17 “(3) ACTIVITIES.—Activities carried out by a
18 covered facility may include the following:

19 “(A) Conducting pilot and demonstration
20 projects to evaluate bioindustrial manufacturing
21 processes and technologies for customers.

22 “(B) Conducting activities to scale bio-
23 industrial manufacturing processes and prod-
24 ucts for scale-up and deployment efforts, and

1 larger, higher, or different levels of production
2 for customers.

3 “(C) Developing, testing, and imple-
4 menting applications and tools, including equip-
5 ment, hardware, software, and algorithms, with
6 industry and academic partners.

7 “(D) Addressing technical challenges
8 around bioindustrial manufacturing inputs and
9 the technologies and processes that break down
10 or convert biomass, waste streams, and other
11 inputs that are useful to the bioindustrial man-
12 ufacturing process, biointermediates, or other
13 products.

14 “(E) Supporting training and workforce
15 development needs in bioindustrial manufac-
16 turing.

17 “(F) Establishing an interoperable, secure,
18 digital infrastructure for collaborative data ex-
19 change across entities in the bioindustrial man-
20 ufacturing community, including government
21 agencies, industry, and academia.

22 “(G) Developing and implementing digital
23 tools, process security and assurance capabili-
24 ties, cybersecurity protocols, and best practices
25 for data storage, sharing, and analysis.

1 “(H) Leveraging data, modeling, and ex-
2 pertise to assist stakeholders in quantifying eco-
3 nomic effects of, and future investment strate-
4 gies relating to, emerging processes and tech-
5 nologies, and incorporating those findings into
6 techno-economic analysis.

7 “(I) Any other activity that the Secretary
8 determines appropriate.

9 “(4) COLLABORATION.—In carrying out the ac-
10 tivities described in paragraph (3), a covered facility
11 may—

12 “(A) develop and implement policies to en-
13 sure open access to the covered facility for pub-
14 lic and private sector entities, with a focus on
15 inclusion of rural communities;

16 “(B) pursue cost-sharing and cofunding
17 arrangements or opportunities with private sec-
18 tor stakeholders to supplement Federal funding
19 and promote financial sustainability; and

20 “(C) to maximize the impact of the covered
21 facility, coordinate and collaborate with—

22 “(i) industry partners, including to
23 identify priority research, development,
24 and demonstration needs;

1 “(ii) other Department facilities, in-
2 cluding National Laboratories;

3 “(iii) the defense community, includ-
4 ing the Department of Defense and
5 BioMADE;

6 “(iv) the agricultural community and
7 relevant Federal agencies, including the
8 Department of Agriculture;

9 “(v) the transportation sector and rel-
10 evant Federal agencies, including the De-
11 partment of Transportation;

12 “(vi) other Federal agencies, including
13 the Department of Commerce, as deter-
14 mined necessary by the covered facility;

15 “(vii) Federal education and work-
16 force development programs, including the
17 National Science Foundation;

18 “(viii) institutions of higher education;

19 “(ix) rural community stakeholders;

20 “(x) nonprofit organizations;

21 “(xi) State and local governments;

22 and

23 “(xii) international bodies with rel-
24 evant scientific expertise.

1 “(5) REQUEST FOR INFORMATION.—Not later
2 than 90 days after the date of enactment of the Bio-
3 industrial Scale-Up for Supply Chains and Energy
4 Resiliency Act of 2026, the Secretary shall publish
5 a request for information that shall be used by the
6 Secretary to evaluate—

7 “(A) existing and planned bioindustrial
8 technology maturation facilities in the United
9 States, including facilities with gas fermenta-
10 tion technologies and large-scale fermentation
11 tanks with robust sensor suites;

12 “(B) best practices for collaboration at
13 those facilities; and

14 “(C) any other information determined
15 necessary for the development of the strategic
16 plan under paragraph (6).

17 “(6) STRATEGIC PLAN.—Not later than 180
18 days after the date of enactment of the Bioindustrial
19 Scale-Up for Supply Chains and Energy Resiliency
20 Act of 2026, the Secretary shall submit to the rel-
21 evant congressional committees a strategic plan for
22 the implementation of this subsection that in-
23 cludes—

1 “(A) an assessment of capacity scaling
2 needs to determine what type of additional
3 technology maturation facilities are needed;

4 “(B) a description of the type, size, and lo-
5 cation of each covered facility that the Sec-
6 retary intends to establish;

7 “(C) the total number of covered facilities
8 that the Secretary intends to establish;

9 “(D) the timelines associated with plan-
10 ning and execution of each covered facility,
11 phased over time; and

12 “(E) a general description of—

13 “(i) the focus of each covered facility,
14 including the types of manufacturing
15 equipment, if any, that are expected to be
16 procured for each covered facility;

17 “(ii) how covered facilities will work
18 as a network to maximize the variety of
19 bioindustrial products available to be pro-
20 duced by the network, including how the
21 capabilities of covered facilities will com-
22 plement the capabilities of existing and
23 planned technology maturation facilities,
24 including those of other Federal agencies,

1 including the Department of Commerce
2 and the Department of Defense;

3 “(iii) how that network will support
4 the establishment and maintenance of the
5 bioindustrial manufacturing industrial
6 base;

7 “(iv) how the Secretary intends to en-
8 sure that data is collected and shared with
9 the rest of that network, as applicable; and

10 “(v) how the Secretary intends to co-
11 ordinate with other Federal agencies, in-
12 cluding the Department of Commerce and
13 the Department of Defense, to ensure the
14 effective use of funds, development of ca-
15 pabilities, and prioritization of biotech-
16 nologies.

17 “(7) INTELLECTUAL PROPERTY PROTEC-
18 TIONS.—

19 “(A) FEDERAL EMPLOYEE CONTRIBU-
20 TIONS.—Any intellectual property created by a
21 Federal employee at a covered facility in the
22 performance of the duties of that Federal em-
23 ployee shall be considered to be part of the pub-
24 lic domain.

1 “(B) OTHER ENTITIES.—Any intellectual
2 property created by an individual at a covered
3 facility who is not a Federal employee shall be
4 protected under applicable intellectual property
5 laws, subject to the terms of the contractual
6 agreement that the individual has entered into
7 with the Secretary.

8 “(C) DATA SHARING.—To the maximum
9 extent practicable, a covered facility shall estab-
10 lish a secure, interoperable digital system to fa-
11 cilitate data exchange across government, aca-
12 demia, and industry.

13 “(8) REPORT TO CONGRESS.—Not later than 1
14 year after the date of enactment of the Bioindustrial
15 Scale-Up for Supply Chains and Energy Resiliency
16 Act of 2026, and at least once every year thereafter
17 for the following 7 years, the Secretary shall submit
18 to the relevant congressional committees, and make
19 publicly available, a report on the activities carried
20 out under this subsection during the year covered by
21 the report, including the progress made in imple-
22 menting the strategic plan under paragraph (6), in-
23 cluding—

24 “(A) the number of existing covered facili-
25 ties;

1 “(B) the number of additional covered fa-
2 cilities being planned, if any;

3 “(C) a description of the activities carried
4 out by covered facilities; and

5 “(D) any collaborations under paragraph
6 (4).

7 “(9) AUTHORIZATION OF APPROPRIATIONS.—
8 There is authorized to be appropriated to the Sec-
9 retary to carry out this subsection \$225,500,000 for
10 the period of fiscal years 2026 through 2030.”.

11 **SEC. 4. TECHNICAL CORRECTION.**

12 The table of contents of the Energy Policy Act of
13 2005 (Public Law 109–58; 119 Stat. 594) is amended by
14 inserting after the item relating to section 1 the following:

“Sec. 2. Definitions.”.

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