AMENDMENT TO
RULES COMMITTEE PRINT 119-33
OFFERED BY MR. BAIRD OF INDIANA

Add at the end of subtitle B of title XVII the following:

SEC. 17___. BIOINDUSTRIAL SCALE-UP FOR SUPPLY CHAINS AND ENERGY RESILIENCY.

(a) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) the biggest roadblock for United States biotechnology innovators to commercialization is proving that their products and processes can scale, thus showing investors a path to financial return;

(2) the United States faces several main challenges to securing the broad range of infrastructure needed for the breadth of products that biotechnology can make, which are that—

(A) the United States lacks sufficient biomanufacturing capacity, including because researchers are generating new products faster than manufacturing capacity is increasing and building new facilities is expensive and time-consuming; and

(B) biomanufacturing technologies of the future have yet to mature into routine commercial applications, as current biomanufacturing facilities are generally optimized for 1 type of product and are usually not compatible with other products; and

(3) to position the United States as a leader in bioindustrial innovation and enable participation in groundbreaking projects through state-of-the-art infrastructure, it is critical to establish technology maturation facilities to provide world-class capabilities.

(b) BIOINDUSTRIAL SCALE-UP FOR SUPPLY CHAINS AND ENERGY RESILIENCY.—Section 932 of the Energy Policy Act of 2005 (42 U.S.C. 16232) is amended—

(1) in subsection (a)—

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

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

''(1) BIOBASED PRODUCT.—The term 'biobased product' has the meaning given the term in section 9001 of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101).

''(2) BIOINDUSTRIAL MANUFACTURING.—The term 'bioindustrial manufacturing' means the use of living organisms, cells, tissues, enzymes, or cell-free systems to produce materials and products for non-pharmaceutical applications.

''(3) BIOINTERMEDIATE.—The term 'biointermediate' means an intermediate product that is derived from biomass or waste streams, including carbon oxides.

''(4) BIOMANUFACTURING.—The term 'biomanufacturing' means the use of biological systems to produce goods and services at commercial scale.'';

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

''(6) BIOTECHNOLOGY.—The term 'biotechnology' means technology that applies to or is enabled by life sciences innovation or product development.''; and

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

''(8) OPEN ACCESS.—The term 'open access', with respect to infrastructure, data, or research resources, means that those resources are—

''(A) available without licensing or intellectual property barriers; and

''(B) accessible to public and private entities on an equitable basis.

''(9) PHYTOBIOME.—The term 'phytobiome' means a network of interactions of plants, their associated communities of organisms, and their environmental context.

''(10) TECHNOLOGY MATURATION.—The term 'technology maturation' means the development, testing, and scaling of technologies to a level of readiness suitable for commercialization or integration into industrial processes, including activities such as prototyping, pilot-scale testing and demonstration, and early-stage manufacturing and market entry.

''(11) WASTE STREAM.—The term 'waste stream' includes municipal solid waste, food waste, urban wood waste, food processing and fermentation waste, sewage, biogas, industrial waste gases, carbon oxides, atmospheric oxides, and waste gases that are effluents or byproduct streams from various societal pursuits that are targeted toward disposal, discharge, or burning.''; and

(2) by inserting after subsection (e) the following:

''(f) BIOINDUSTRIAL TECHNOLOGY MATURATION FACILITIES.—

''(1) IN GENERAL.—Not later than September 30, 2030, the Secretary shall establish not fewer than 2 bioindustrial technology maturation facilities (referred to in this subsection as 'covered facilities')—

''(A) to conduct research, development, demonstration, and commercial application to derisk product and process technologies for biotechnology-based products relevant to the mission of the Department;

''(B) that are precommercial; and

''(C) that shall operate as user facilities available to governmental and nongovernmental users.

''(2) CONSIDERATIONS.—In determining the number, type, and location of covered facilities to establish, the Secretary shall—

''(A) consider—

''(i) the greatest needs of industry and the gaps in current types of infrastructure;

''(ii) unique capabilities that are currently not available anywhere in the world;

''(iii) how the covered facilities may—

''(I) complement current infrastructure and capabilities, including infrastructure and capabilities of—

''(aa) the Department, including National Laboratories;

''(bb) the Department of Defense;

''(cc) the Department of Commerce; and

''(dd) other covered facilities; and

''(II) increase production levels by functioning as a connected network, including by ensuring that available fermentation capacity, including of covered facilities and facilities of the Department, covers the full range needed for precommercial scale-up; and

''(iv) how each covered facility aligns with regional and local workforce needs, pre-existing capabilities, the skills required for the proposed biomanufacturing operations, and the potential for regional and

local workforce development and job creation; and

''(B) ensure that—

''(i) covered facilities are in geographically diverse locations—

''(I) to maximize access to biological material needed as an input to bioindustrial manufacturing processes;

''(II) to leverage available industrial and academic expertise, including workforce and human capital; and

''(III) to leverage relevant domestic infrastructure required to secure supply chains for chemicals and other materials;

''(ii) covered facilities are complementary to each other and any other existing related facilities; and

''(iii) the first covered facility is planned and built within a 2-year time period, and the plan for the second and each subsequent facility is developed while construction occurs on the earlier planned covered facility.

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

''(A) Conducting pilot and demonstration projects to evaluate bioindustrial manufacturing processes and technologies for customers.

''(B) Conducting activities to scale bioindustrial manufacturing processes and products for scale-up and deployment efforts, and larger, higher, or different levels of production for customers.

''(C) Developing, testing, and implementing applications and tools, including equipment, hardware, software, and algorithms, with industry and academic partners.

''(D) Addressing technical challenges around bioindustrial manufacturing inputs and the technologies and processes that break down or convert biomass, waste streams, and other inputs that are useful to the bioindustrial manufacturing process, biointermediates, or other products.

''(E) Supporting training and workforce development needs in bioindustrial manufacturing.

''(F) Establishing an interoperable, secure, digital infrastructure for collaborative data exchange across entities in the bioindustrial manufacturing community, including government agencies, industry, and academia.

''(G) Developing and implementing digital tools, process security and assurance capabilities, cybersecurity protocols, and best practices for data storage, sharing, and analysis.

''(H) Leveraging data, modeling, and expertise to assist stakeholders in quantifying economic effects of, and future investment strategies relating to, emerging processes and technologies, and incorporating those findings into techno-economic analysis.

''(I) Any other activity that the Secretary determines appropriate.

''(4) COLLABORATION.—In carrying out the activities described in paragraph (3), a covered facility may—

''(A) develop and implement policies to ensure open access to the covered facility for public and private sector entities, with a focus on inclusion of rural communities;

''(B) pursue cost-sharing and cofunding arrangements or opportunities with private sector stakeholders to supplement Federal funding and promote financial sustainability; and

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

''(i) industry partners, including to identify priority research, development, and demonstration needs;

''(ii) other Department facilities, including National Laboratories;

''(iii) the defense community, including the Department of Defense and BioMADE;

''(iv) the agricultural community and relevant Federal agencies, including the Department of Agriculture;

''(v) the transportation sector and relevant Federal agencies, including the Department of Transportation;

''(vi) other Federal agencies, including the Department of Commerce, as determined necessary by the covered facility;

''(vii) Federal education and workforce development programs, including the National Science Foundation;

''(viii) institutions of higher education;

''(ix) rural community stakeholders;

''(x) nonprofit organizations;

''(xi) State and local governments; and

''(xii) international bodies with relevant scientific expertise.

''(5) REQUEST FOR INFORMATION.—Not later than 90 days after the date of enactment of the National Defense Authorization Act for Fiscal Year 2027, the Secretary shall publish a request for information that shall be used by the Secretary to evaluate—

''(A) existing and planned bioindustrial technology maturation facilities in the United States, including facilities with gas fermentation technologies and large-scale fermentation tanks with robust sensor suites;

''(B) best practices for collaboration at those facilities; and

''(C) any other information determined necessary for the development of the strategic plan under paragraph (6).

''(6) STRATEGIC PLAN.—Not later than 180 days after the date of enactment of the National Defense Authorization Act for Fiscal Year 2027, the Secretary shall submit to the relevant congressional committees a strategic plan for the implementation of this subsection that includes—

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

''(B) a description of the type, size, and location of each covered facility that the Secretary intends to establish;

''(C) the total number of covered facilities that the Secretary intends to establish;

''(D) the timelines associated with planning and execution of each covered facility, phased over time; and

''(E) a general description of—

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

''(ii) how covered facilities will work as a network to maximize the variety of bioindustrial products available to be produced by the network, including how the capabilities of covered facilities will complement the capabilities of existing and planned technology maturation facilities, including those of other Federal agencies, including the Department of Commerce and the Department of Defense;

''(iii) how that network will support the establishment and maintenance of the bioindustrial manufacturing industrial base;

''(iv) how the Secretary intends to ensure that data is collected and shared with the rest of that network, as applicable; and

''(v) how the Secretary intends to coordinate with other Federal agencies, including the Department of Commerce and the Department of Defense, to ensure the effective use of funds, development of capabilities, and prioritization of biotechnologies.

''(7) INTELLECTUAL PROPERTY PROTECTIONS.—

''(A) FEDERAL EMPLOYEE CONTRIBUTIONS.—Any intellectual property created by a Federal employee at a covered facility in the performance of the duties of that Federal employee shall be considered to be part of the public domain.

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

''(C) DATA SHARING.—To the maximum extent practicable, a covered facility shall establish a secure, interoperable digital system to facilitate data exchange across government, academia, and industry.

''(8) REPORT TO CONGRESS.—Not later than 1 year after the date of enactment of the National Defense Authorization Act for Fiscal Year 2027, and at least once every year thereafter for the following 7 years, the Secretary shall submit to the relevant

congressional committees, and make publicly available, a report on the activities carried out under this subsection during the year covered by the report, including the progress made in implementing the strategic plan under paragraph (6), including—

''(A) the number of existing covered facilities;

''(B) the number of additional covered facilities being planned, if any;

''(C) a description of the activities carried out by covered facilities; and

''(D) any collaborations under paragraph (4).

''(9) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary to carry out this subsection $225,500,000 for the period of fiscal years 2026 through 2030.''.

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

''Sec. 2. Definitions.''.