

Name of Organization: Plant Based Products Council

Date: August 12, 2026

Subject: Statistical Policy Directive No. 8: North American Industry Classification System (NAICS)-Request for Comments on Proposed Updates for 2027

FR Reference: Federal Register / Vol. 91, No. 132 / Monday, July 13, 2026 / Notices

Docket Number: USBC-2026-0133

The Plant Based Products Council (PBPC) appreciates this opportunity to provide input in response to the Office of Management and Budget's (OMB) July 13, 2026 solicitation for comments on the Economic Classification Policy Committee's (ECPC) recommendations for the 2027 revision of the North American Industry Classification System (NAICS).

PBPC disagrees with the conclusion of the ECPC not to propose NAICS codes specific to renewable chemical and biobased products manufacturers. If the proposal is finalized as drafted, the Trump Administration will miss the opportunity to strengthen domestic manufacturing, expand markets for American agriculture, and grow economic opportunity in rural communities. Additionally, failure to update the proposal to include bioeconomy-related NAICS codes ignores Congressional direction in the 2018 Farm Bill¹ to create NAICS codes for manufacturers of renewable chemicals and biobased products as part of this process.

PBPC represents businesses large and small who are committed to advancing the bioeconomy and advocating for a shift toward more sustainable and responsible consumer products and packaging through greater use of plant-based materials (sometimes termed "bioproducts" or "biobased products"). Plant-based products are derived from renewable sources, such as algae, bamboo, corn, hemp, soy, and agriculture waste. Plant-based products are just one aspect of the broader bioeconomy.

A successful U.S. bioeconomy helps ensure increased market opportunities for farmers and expanded investment in biomanufacturing infrastructure—two key drivers of healthy, vibrant, and growing rural communities. Success of the U.S. agriculture sector and growth of U.S. manufacturing are keys tenets in advancing an "America First" agenda.

The need for improved effectiveness of measurement and data collection has spanned several Administrations. Revisions to the NAICS codes that better reflect renewable chemicals and biobased products would allow for more consistent and accurate measurement of this growing sector of U.S. manufacturing, support investment in domestic biomanufacturing, and bolster national security and American competitiveness.

¹ Pub. L. No. 115-334, H.R. 2, the Agriculture Improvement Act of 2018. 115th Congress. §9002(f)(1). <https://www.congress.gov/bill/115th-congress/house-bill/2>.

Presidential Administrations have made growth of the bioeconomy a priority for more than 25 years. In fact, the 2019 White House Summit on America’s Bioeconomy noted that it “represents the infrastructure, innovation, products, technology, and data derived from biologically-related processes and science that drive economic growth, improve public health, agricultural, and security benefits. Bioeconomy outputs are incredibly diverse, and future applications limitless in terms of both application and value, including new ways to treat cancer; enable novel manufacturing methodologies for medicines, plastics, materials, and consumer products; create pest and disease resistant crops; and support DNA-based information systems that can store exponentially more data than ever before.”²

In late 2025, the Department of War narrowed its research focus to six critical technology areas. This priority list includes biomanufacturing among the technologies needed to ensure U.S. military superiority.³ Strong data and measurement capabilities, including bioeconomy-specific NAICS codes, would allow for targeted Federal and private sector investment to drive toward U.S. dominance in innovation vital to military success.

The Trump Administration’s *Research and Development Budget Priorities for Fiscal Year 2028* were released in July 2026. They highlight the need for foundational research in the biological sciences in support of “Administration priorities in biotechnology and biomanufacturing” and direct Federal investments to build “domestic manufacturing capacity and supply chains to produce the next generation” of strategic technologies, including biotechnology. Specifically, the memo calls for spurring “non-Federal investment to the greatest extent possible.”⁴

Congress has also prioritized growth of the U.S. bioeconomy in recent years. For example, the *National Defense Authorization Act for Fiscal Year 2022* (P.L. 117-81) established the bipartisan National Security Commission on Emerging Biotechnology (NSCEB). The independent commission was charged with reviewing “emerging biotechnology and associated technologies” across scientific disciplines, including medicine, agriculture, and biomanufacturing.⁵ This included considering the global race with China and other competitors in research and commercialization of biomanufacturing. In its April 2025 final report, the NSCEB noted that “China is quickly ascending to biotechnology dominance, having made biotechnology a strategic priority for 20 years. To remain competitive, the United States must take swift action.”⁵

² The White House Office of Science and Technology Policy. (2019, October). Summary of the 2019 White House Summit on America’s Bioeconomy. <https://trumpwhitehouse.archives.gov/wp-content/uploads/2019/10/Summary-of-White-House-Summit-on-Americas-Bioeconomy-October-2019.pdf>.

³ U.S. Department of War. (2025, November). Under Secretary of War for Research and Engineering Emil Michael Announces Six Critical Technology Areas for the War Department. <https://www.war.gov/News/Releases/Release/Article/4333074/under-secretary-of-war-for-research-and-engineering-emil-michael-announces-six/>

⁴ The White House Office of Science and Technology Policy and Office of Management and Budget. (2026, July). White House Fiscal Year 2028 Research and Development Priorities Memorandum (p. 7). <https://www.whitehouse.gov/wp-content/uploads/2026/07/White-House-Fiscal-Year-2028-RD-Priorities-Memorandum.pdf>

⁵ National Security Commission on Emerging Biotechnology. (2025, April). Charting the Future of Biotechnology: An Action Plan for American Security and Prosperity. <https://www.biotech.senate.gov/final-report/chapters/>.

Among the Commission’s forty-nine recommendations in the final report, the need for interagency coordination of biotechnology policy and investment of Federal resources was clear. Targeting and measuring Federal policies that attract private sector investment and scale domestic innovation infrastructure would be facilitated with NAICS codes specific to renewable chemical and biobased products manufacturers. More effectively tracking biomanufacturing activity will help drive U.S. leadership relative to China and other nations.

Growing global market demand and the history of U.S. Government prioritization of the sector has helped strengthen the domestic bioeconomy over the past several decades. In fact, the most recent USDA-commissioned “An Economic Impact Analysis of the U.S. Biobased Products Industry” estimates that “the value-added contribution to the U.S. economy reached \$489 billion in 2021, up from \$470 billion in 2017.”⁶ And, there are several examples to support that there is continued growth and investment across a range of product categories. In 2024, a Boston Consulting Group report estimated “that scaling up industrial precision fermentation can create a \$200 billion market by 2040, seven times the current size, if companies build enough production capacity to lower costs.”⁷

With continued growth in the bioeconomy comes increased employment opportunities, many of which are happening in rural communities. The biomanufacturing sector provides nearly 4 million jobs, and for each biobased products industry job, 1.4 more jobs are supported in other sectors of the U.S. economy.⁸ The growing plant-based products industry demands engineers and chemists as well as high-quality skilled manufacturing, service, and related employees. And, these are high-paying job opportunities. Employees in the agricultural feedstock and industrial biosciences earn an average of nearly \$102,000 per year. That’s significantly greater —about \$30,000 —than the U.S. average private sector wage.⁹

Products derived from renewable agricultural commodities are an important part of the U.S. and global bioeconomy. Biobased products span a diverse array of product categories including

⁶ Golden, J.S., Handfield, R.B. Daystar, J., and S. Pires (2024). An Economic Impact Analysis of the U.S. Biobased Products Industry: 2023 Update. Volume V. A Joint Publication of the Dynamic Sustainability Lab at Syracuse University and the Supply Chain Resource Cooperative at North Carolina State University.

⁷ Bobier, J.F., Cerisy, T., Coulin, A. D., Blecher, C, Sassoon, V, and B. Alexander (2024, February). Breaking the Cost Barrier in Biomanufacturing. Boston Consulting Group. <https://web-assets.bcg.com/b6/15/6a10d22c481e8bebaf0c2fab8294/bcg-breaking-the-cost-barrier-on-biomanufacturing-rev.pdf>

⁸ Golden, J.S., Handfield, R.B. Daystar, J., and S. Pires (2024). An Economic Impact Analysis of the U.S. Biobased Products Industry: 2023 Update. Volume V. A Joint Publication of the Dynamic Sustainability Lab at Syracuse University and the Supply Chain Resource Cooperative at North Carolina State University.

⁹ Teconomy Partners LLC. (2024, June). The Economic Impact of the U.S. Industrial Bioeconomy. <https://content.presspage.com/uploads/2544/4f7314e2-c45e-4e26-86be-70580565812b/economicimpactofu.s.industrialbioeconomy.v6.6.pdf?10000>

renewable chemicals, cleaning supplies, packaging, tableware, furniture, and clothing. Innovation is a constant within the product categories. Historically, USDA's BioPreferred Program has identified about 20,000 biobased products, and there are currently about 10,000 products listed in the database. However, there are estimates that over 40,000 biobased products are actually in the marketplace because not all eligible products participate in the voluntary BioPreferred program.¹⁰

A significant challenge facing the U.S. bioeconomy stems from the fact that NAICS currently does not provide an effective way to track the economic and job implications of the growing industry. There are no industry- or product-specific NAICS codes that accurately or clearly represent the bioeconomy, making it difficult to transparently and consistently measure the U.S. bioeconomy. Improved industry statistics from a readily accessible source are crucial to measuring the economic impact. New biobased NAICS codes and language will enhance the ability of firms and researchers to track the industry and for government policymakers and other stakeholders to make better informed decisions and policy. For more than a decade, academics, stakeholders, and Congress have recommended that NAICS codes be developed for the bioeconomy, including biobased products and chemicals.

For example:

- *USDA Biobased Economy Indicators: A Report to the U.S. Congress (September 2011):*¹¹

“As the NAICS system now stands, there is no simple way to gather data on biobased products since there is not a NAICS three-digit code for products manufactured out of biobased feedstocks, as has been defined for the metal fabrication product manufacturing sector. Also, for the various three-digit NAICS categories more aligned with end-use products, there are no six-digit numbers set aside for biorenewable feedstocks, with few exceptions. For example, some information on the use of wood in biobased products could be captured in some of the subsectors like nonupholstered wood household furniture manufacturing, which was previously mentioned. However, a chair made out of a recently developed biorenewable feedstock, like polylactide acid (PLA), could not be easily captured. A chair that is predominantly made out of PLA would currently be captured in the household furniture (except wood and metal) manufacturing (337125) subsector. Similar difficulties occur with other NAICS sectors. The ability to capture trade information is limited since many of the subsectors within the wholesale trade and retail trade sectors are similar to manufacturing subsectors. For instance, the sale of biobased furniture could be captured in both of the generic subsectors furniture merchant wholesalers (423210) and furniture stores (442110).”

¹⁰ Golden, J.S., Handfield, R.B. Daystar, J., and S. Pires (2024). An Economic Impact Analysis of the U.S. Biobased Products Industry: 2023 Update. Volume V. A Joint Publication of the Dynamic Sustainability Lab at Syracuse University and the Supply Chain Resource Cooperative at North Carolina State University.

¹¹ USDA, *Biobased Economy Indicators: A Report to the U.S. Congress*. Washington (2011). https://www.usda.gov/oce/reports/energy/USDA%20Bioindicators982011_2.pdf

- *USDA. An Economic Impact Analysis of the U.S. Biobased Products Industry (2015):*¹²
 “NAICS does not provide an effective means of tracking the economic and job implications of the biobased products sector in the United States. This results from a lack of industry-specific codes that were representative of the biobased products sectors of the economy. Many economists and industry groups recommended that NAICS codes be developed for biobased products and that reporting requirements be established to allow more effective tracking.”
- *Robert Carlson, Estimating the biotech sector's contribution to the US economy (2016):*¹³
 “Consequently, using the current NAICS to estimate biotech employment is a difficult proposition, because the current codes do not map well onto existing and emerging bioproduction methods. Modernizing the NAICS must be a priority of both the public and private sectors to enable accurate economic analyses, employment measurements and appropriate marshaling and allocation of resources.”
- *USDA. An Economic Impact Analysis of the U.S. Biobased Products Industry (2018):*¹⁴
 “One of the limitations of undertaking this research is that, at present, no North American Industry Classification System (NAICS) codes have been established specifically for biobased products. The NAICS is the standard used by federal agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to U.S. businesses.”
- *Agriculture Improvement Act of 2018 Section 9002(2) (2018 Farm Bill):*¹⁵
 The 2018 Farm Act specifically calls for the federal government to develop NAICS codes for biobased products.
 “(1) NAICS CODES.—The Secretary [of Agriculture] and the Secretary of Commerce shall jointly develop North American Industry Classification System codes for—
 (A) renewable chemicals manufacturers;
 and
 (B) biobased products manufacturers.”

¹² Golden, Jay S. et al. *An Economic Impact Analysis of the U.S. Biobased Products Industry: A Report to the Congress of the United States of America*. Industrial Biotechnology 11 (2015).
https://www.researchgate.net/publication/280979090_An_Economic_Impact_Analysis_of_the_US_Biobased_Products_Industry_A_Report_to_the_Congress_of_the_United_States_of_America

¹³ Carlson, R. *Estimating the biotech sector's contribution to the US economy*. Nat Biotechnol 34, 247–255 (2016).
<https://doi.org/10.1038/nbt.3491>

¹⁴ Daystar, Jesse et. al. *An Economic Impact Analysis of the U.S. Biobased Products Industry*. United States Department of Agriculture BioPreferred® Program (2018).
<https://www.biopreferred.gov/BPResources/files/BiobasedProductsEconomicAnalysis2018.pdf>

¹⁵ Agriculture Improvement Act of 2018, § 9002 (2). PL 115-334.

- *National Academies. Safeguarding the Bioeconomy (2020):*¹⁶

“Recommendation 2-2: The existing North American Industry Classification System (NAICS) and North American Product Classification System (NAPCS) codes should be revised to more accurately capture and track commercial activity and investments related to the biological sciences and track the growth of individual segments of the bioeconomy (e.g., biological production of chemicals and materials). In addition, the U.S. Department of Commerce’s Office of Technology Evaluation should undertake a study aimed at richer characterization of the permeation of biologically based products, processes, and services in the U.S. economy. Such a study would greatly inform revisions of the NAICS and NAPCS codes. Additionally, the U.S. Census Bureau should refine and regularly collect comprehensive statistics on bioeconomic activities.”

- *USDA. An Economic Impact Analysis of the U.S. Biobased Products Industry (2021):*¹⁷

“Recommendation #1: The authors have recommended the U.S. government develop annual measurements of the biobased products industry multiple times. Specifically, we have called for the development of NAICS codes for the biobased products industry similar to what exists for the rest of the domestic economy.”

Additionally, an Executive Order “directed the U.S. Bureau of Economic Analysis (BEA) to assess “the feasibility, scope, and costs of developing a national measurement of the economic contributions of the bioeconomy.” The conclusions of the BEA as stated in their report completed in just 180 days stated, “Developing a bioeconomy satellite account using a broad, comprehensive definition of the bioeconomy appears to be technically feasible and would correspond to similar efforts by the EU and other international organizations.”

And, further, “we strongly recommend that Congress and/or the Administration direct the USDA take the lead in coordination with the Department of Commerce to organize a Technical Advisory Council in some form that goes beyond prior work of a single agency to include technical experts from industry, academia, government and NGOs to develop a pathway for the Federal Government to develop the tracking of the economic impacts of the U.S. biobased products industry.”

¹⁶ National Academies of Sciences, Engineering, and Medicine. *Safeguarding the Bioeconomy*. Washington, DC: The National Academies Press (2020). doi: <https://doi.org/10.17226/25525>.

¹⁷ Golden, J.S., Handfield, R.B. Daystar, J., and S. Pires (2024). *An Economic Impact Analysis of the U.S. Biobased Products Industry: 2023 Update. Volume V. A Joint Publication of the Dynamic Sustainability Lab at Syracuse University and the Supply Chain Resource Cooperative at North Carolina State University.*

- *Farm, Food, and National Security Act of 2026, Section 9002(2) (House-passed Farm Bill):*¹⁸

The House-passed 2026 Farm Bill specifically calls for the federal government to develop NAICS codes for biobased products. Additionally, the language requires the Administration report on existing NAICS and NAPCS codes that utilize bioeconomy-specific data, recommendations for 2027 NAICS revisions, and an assessment of impacts bioeconomy-specific NAICS and NAPCS would have on measuring economic contributions.

Per USDA classifications, the major sectors that represent the U.S. biobased products industry's contribution to the U.S. economy include Agriculture and Forestry, Biobased Chemicals, Bioplastic Bottles and Packaging, Biorefining, Enzymes, Forest Products, and Textiles. To conduct an economic impact analysis of the biobased products industry, economists and other stakeholders must currently review each relevant sector and estimate the percentage of economic activity within that sector that is relevant to the biobased portion of the total sector. Percentage estimates are derived through analysis of sources such as published literature, reports, industry data, market reports, and consultations with relevant experts. Clearly, development of bioeconomy-specific NAICS codes would allow for more consistent and accurate analysis of the economic impact of biobased products and the growing bioeconomy.

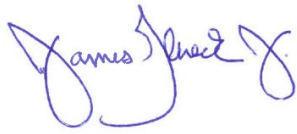
Consistent with the repeated conclusions by academics, policymakers, and industry stakeholders as well as the commitments across several Presidential Administrations to improve data and statistical measurement of the bioeconomy, PBPC requests amendments to the proposed 2027 NAICS revisions to better reflect renewable chemicals and biobased product manufacturers.

The 2027 NAICS revision is the right opportunity for the Trump Administration to focus on the domestic biomanufacturing sector. The long-overdue changes would allow for more consistent and accurate measurement of this valuable and growing aspect of the U.S. economy. As a result, there would be stronger domestic marketing opportunities for American farmers and greater private sector investment in the innovation and infrastructure needed to ensure U.S. dominance in the bioeconomy. It is imperative that steps be taken during the 2027 NAICS revision so that the United States is a global leader in biomanufacturing. The nation's security and economic success depend on strong, successful U.S. leadership.

Thank you for your consideration of these comments. Please contact me at james@pbpc.com or 202-331-1634 with any questions.

¹⁸ Farm, Food, and National Security Act of 2026, § 9002 (2). (2026). H.R. 7567, 119th Congress. <https://www.congress.gov/119/bills/hr7567/BILLS-119hr7567eh.pdf>

Sincerely,

A handwritten signature in blue ink, reading "James Glueck, Jr." with a stylized flourish at the end.

James Glueck, Jr.
Executive Director