

USDA Bioeconomy Activities and Involvement in Bioeconomy Executive Order

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Executive Order on Advancing Biotechnology and Biomanufacturing Innovation for a Sustainable, Safe, and Secure American Bioeconomy

[BRIEFING ROOM](#)[PRESIDENTIAL ACTIONS](#)

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. Policy. It is the policy of my Administration to coordinate a whole-of-government approach to advance biotechnology and biomanufacturing towards innovative solutions in health, climate change, energy, food security, agriculture, supply chain resilience, and national and economic security.

Central to this policy and its outcomes are principles of equity, ethics, safety, and security that enable access to technologies, processes, and products in a manner that benefits all Americans and the global community and that maintains United States technological leadership and economic competitiveness.

Biotechnology and Biomanufacturing in Food and Agriculture Innovation

USDA's bold goals center on three themes:

1. Improve sustainability while increasing productivity
 - Increase climate-smart feedstock and biofuel usage
 - Reduce nitrogen and methane emissions
 - Reduce food waste
2. Increase food nutrition, quality, and consumer choice
 - Enhance food nutrient density
 - Develop new food and feed sources
 - Reduce foodborne illness
3. Protect plants and animals against environmental stress
 - Detect and mitigate pests and pathogens
 - Improve plant and animal resilience to environmental stress



EO Deliverables

- Plan to support the resilience of the United States biomass supply chain for domestic biomanufacturing and biobased product manufacturing (released soon)
- Streamlining and clarifying the regulatory systems (USDA co-lead)

USDA Bioeconomy Research and Development

- **Total investment in FY23 of more than \$500 million**
- Research on plant, animal and microorganism genetics to improve productivity and resilience to pests, diseases, and climate change
- Bioenergy research on the agronomic production of crops that can be used as dedicated feedstocks for bioenergy and use of agricultural wastes for energy production, such as manure digestion for biogas production
- Forestry research in the production, utilization, and protection of forestland
- Research into alternative proteins, including cell-cultured meat
 - Developing biobased methods to convert vegetable oils and compounds into products for the personal care market
 - NIFA Bioproducts program: Funding to Soylei Innovations for a project that proposes to transform high oleic soybean oil into thermoplastic rubber for pavements.

Investment in Bioeconomy infrastructure, manufacturing capacity and product development

- Rural Development has invested in different loan guarantee and grant programs
 - Higher Blends Infrastructure Incentive Program
 - Fertilizer Production Expansion Program -- renewable sources such as compost and animal waste
 - Rural Energy for America Program -- Biomass and Biogas projects
 - Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program (9003)
- USDA Forest Service funded projects to support innovation, market development, and new and expanded manufacturing capacity of wood-based products

The USDA BioPreferred® Program

MISSION

- Spur economic development
- Create resilient markets for farm commodities
- Increase manufacturing at the farm gate
- Reduce reliance on petroleum
- Reduce the impacts of climate change
- Support a thriving rural America

www.biopreferred.gov



Two Major Programs:
Voluntary Labeling
Federal Procurement Preference



Biobased Cleaner



Biobased linoleum made from linseed oil, pine rosins, wood flour

BioPreferred – Federal Procurement

Federal law and the Federal Acquisition Regulation direct that **all** Federal agencies purchase biobased products in categories identified by the USDA. To date, USDA has identified **139 categories** of biobased products for which agencies and their contractors have mandatory purchasing requirements.

Biobased product purchasing requirements are included in:

- Solicitations
- Blanket purchase agreements
- Contracts
- Specifications
- Purchase Card purchases
- Electronic catalogs
- Other procurement services

<https://www.biopreferred.gov/BioPreferred/faces/pages/ProductCategories.xhtml>

BioPreferred® Program Statistics

- **Over 2,400 companies** participate in the BioPreferred® Program
- Products registered in the catalog from **all 50 states**
 - From multi-national companies to small businesses
- **8,900 products** in catalog qualify for federal purchasing
- **8,200 products** have received the USDA Certified Biobased Product Label
- **55 countries** have products in catalog



Statistics as of February 1, 2024

USDA Bioeconomy Goals

- Improve **food security**
- Strengthen **supply chains and increase competition**
- Reduce impacts of **climate change** and make agriculture more sustainable
- **Create jobs** across America, especially in rural communities





In February, we will host four virtual Town Hall meetings to hear from the research community about the ideas they view as having exciting potential to advance the bioeconomy. These Town Halls will be highly interactive with lots of time for breakout discussions among community members. The Town Halls will all have the same agenda but are offered at different days and times to accommodate different schedules. Everyone is welcome to attend the Town Halls and to share research ideas!

We suggest you view the EO Themes and Representative Subtheme Challenges, as you consider the challenges and ideas you would like to share.


Option 1

If you are able to attend, register for a Town Hall to collaborate with others on developing research ideas, and share your individual ideas ahead of the Town Hall.

1) Select Your Best Date


-  February 12th, 2024 @ 7pm - 8:30pm EST
-  February 15th, 2024 @ 9am - 10:30am EST
-  February 21st, 2024 @ 12pm - 1:30pm EST
-  February 22nd, 2024 @ 5pm - 6:30pm EST

2) Share Your Exciting Research Idea About Your Favorite Theme!

 **Share your ideas**

Option 2

If you are unable to attend a Town Hall, we would still love to hear our research ideas, so please share online.

 **Share your ideas**

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*Together, we can improve worker health.
Together, we can reduce carbon emissions.
Together, we can reduce dependence on petroleum.*





Advancing the Bioeconomy in Rural Areas

James Glueck, Jr.

Plant Based Products Council

USDA Agricultural Outlook Forum

February 15, 2024

DIVERSE PRODUCTS



Household Cleaners



Furniture



Building Materials



Personal Care Products



Food Service Ware



Textiles



Packaging



Auto Parts



Office Supplies



Toys



Medical Supplies



Footwear

DIVERSE FEEDSTOCKS



Agricultural Residue



Algae



Bamboo



Sugar Cane



Hemp



Sugar Beet



Wood



Dent Corn



Cassava (aka Yucca)



Rice Husk



Palm Leaf



Soy Beans

The move toward biobased products

Trends converging to accelerate movement toward biobased products:



Environmental Benefits



Consumer Trends



Feedstock Productivity

Benefits of Biobased products



Support growth of the U.S. bioeconomy



New market opportunities for commodity crops



Same or better functionality



Addresses numerous environmental challenges



Improved circularity

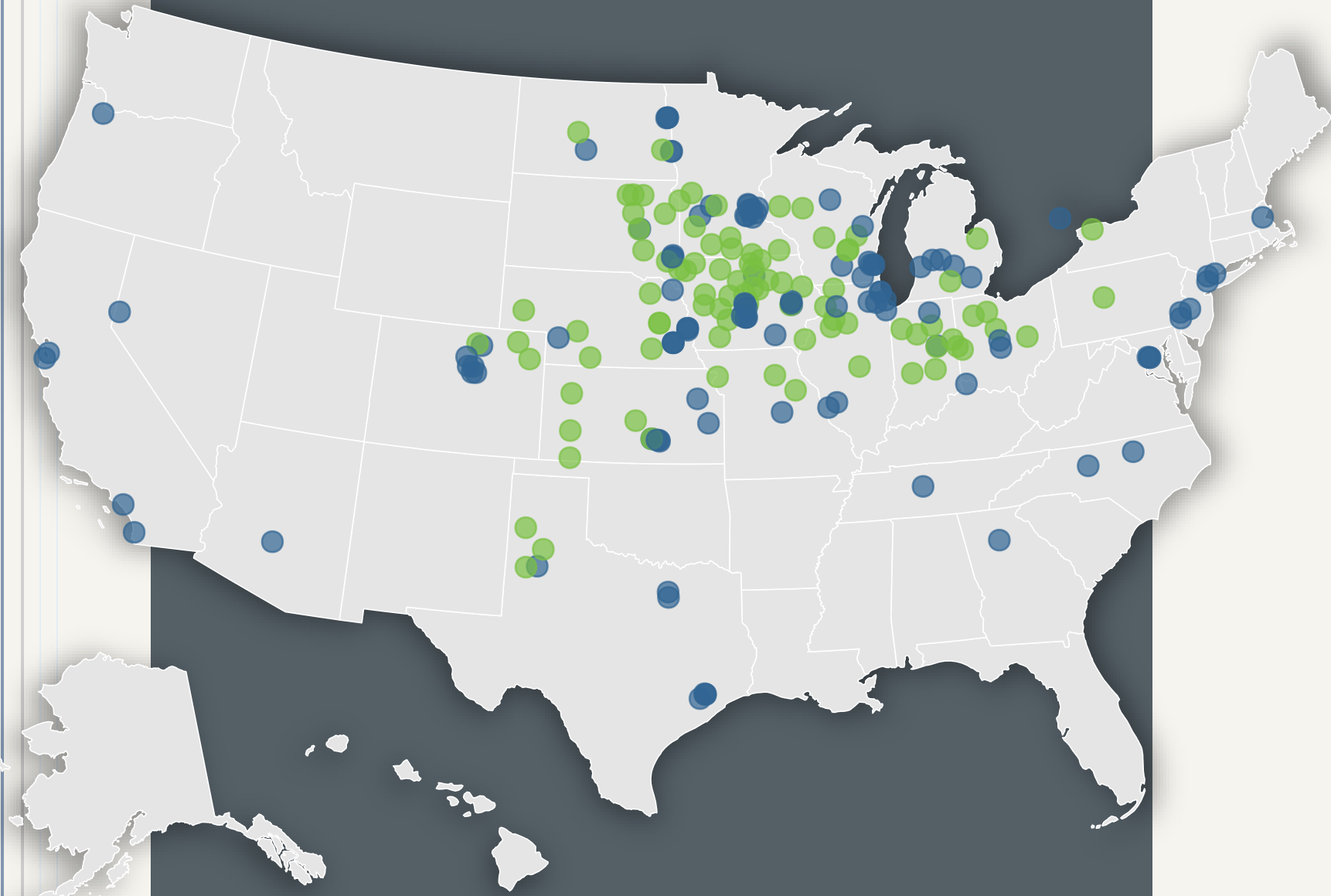
Industry Challenges





Growth Energy™

Expanding America's Bioeconomy



Representing
9.5 Billion Gallons
of Bioethanol Production



Growth Energy™
Expanding America's Bioeconomy

Growth Energy is the leading biofuels trade association.

We represent producers and supporters of ethanol who are working to bring consumers better choices at the fuel pump, grow America's bioeconomy, and improve the environment for future generations.

97

Producer Plants

115

Associate Members



**Automobile
Fuels**



**Animal
Nutrition**



Corn Oil



Biogenic CO₂



**Non-Road
Transportation
Fuels**



**Health & Industrial
Applications**

