

Policy Update: Biden Administration Announces New Bioeconomy Report and DOD Biomanufacturing Engagement Opportunity

Lewis-Burke Associates LLC – March 27, 2023

As part of its continued efforts to advance the U.S. bioeconomy, the Biden Administration [released](#) a new report titled “**Bold Goals for U.S. Biotechnology and Biomanufacturing: Harnessing Research and Development to Further Societal Goals.**” The report was compiled as directed by [Executive Order 14801](#), *Advancing Biotechnology and Biomanufacturing Innovation for a Sustainable, Safe, and Secure American Bioeconomy*, issued by President Biden in September 2022. The report is divided into five sections, each spearheaded by a different federal agency or department: climate change solutions (led by the Department of Energy); food and agriculture innovation (led by the Department of Agriculture); supply chain resilience (led by the Department of Commerce); human health (led by the Department of Health and Human Services); and cross-cutting advances (led by the National Science Foundation). In addition to input from agencies, the report reflects feedback received by the White House Office of Science and Technology Policy (OSTP) through its December 2022 [Request for Information](#) on the National Biotechnology and Biomanufacturing Initiative.

Within each section, the report outlines bold goals that could be achieved over the next two decades through coordinated action in the public and private sectors. The report notes specific research and development activities that will be needed in order to achieve these goals, and mentions that, “in the upcoming months,” OSTP will develop a strategy and implementation plan to execute the report’s research and development priorities.

In a panel discussion celebrating the release of the report, OSTP Senior Advisor for Biotechnology and Biomanufacturing, Georgia Lagoudas, said that OSTP welcomes feedback on the report. She noted that OSTP is especially interested in hearing which goals resonate with the research community and what work is currently underway to achieve these goals.

Each of the report’s five sections is divided into broad themes, listed below, each with specific goals:

- **Climate Change Solutions:**
 - Transportation and Stationary Fuels
 - Chemicals and Materials
 - Climate-Focused Agricultural Systems and Plants
 - Carbon Dioxide Removal
- **Food and Agriculture Innovation:**
 - Improving Sustainability and Resource Conservation While Increasing Agricultural Productivity
 - Improving Food Nutrition Quality, and Consumer Choice
 - Protecting Plants and Animals Against Environmental Stressors
- **Supply Chain Resilience:**
 - Alternative Supply Chain Pathways via Biotechnologies and Biomanufacturing to Promote Economic Security
 - Biomanufacturing Innovation to Enhance Supply Chain Resilience
 - Standards and Data Infrastructure to Support Biotechnology and Biomanufacturing Commercialization and Trade

- **Human Health:**
 - Accessible Health Monitoring
 - Precision Multi-Omic Medicine
 - Biomanufacturing of Cell-Based Therapies
 - AI-Driven Bioproduction of Therapeutics
 - Advanced Techniques in Gene Editing
- **Cross-Cutting Advances:**
 - Leverage Biodiversity Across the Tree of Life to Power the Bioeconomy
 - Enhance Predictive Modeling and Engineering Design of Biological Systems
 - Expand Capabilities to Build and Measure Performance and Quality of Biological Systems
 - Advance Scale-Up and Control of Biological Systems
 - Innovate Biomanufacturing Approaches
 - Enable Ethical, Safe, and Equitable Co-Generation and Translation of Biotechnology Products

DOD Biomanufacturing Strategy and Request for Information

In addition to the cross-agency report discussed above, the Department of Defense (DOD) released its own [Biomanufacturing Strategy](#) to guide its investments in its domestic bioindustrial manufacturing base. Major principles reflected across the strategy include “establishing transition partners for early-stage innovations,” “developing biomanufacturing through innovations in practice and application,” and “mapping the biomanufacturing ecosystem and tracking metrics that support future DOD biomanufacturing efforts.”

To support the implementation of this strategy, the Defense Production Act Investments (DPAI) Office, in coordination with the Department of the Air Force, released a request for information (RFI) entitled “Domestic Industrial Capability for Distributed Manufacturing Enabled by Modular Bioindustrial & Reusable Assets.” The RFI seeks input from industry on necessary biomanufactured materials or products to address defense needs and challenges. In addition, it solicits information on the manufacturing, technical, and market barriers to developing businesses in three areas of interest: Products, Processes, and Investments. RFI submissions are due no later than **April 19, 2023, at 12:00 PM ET**. Further information and the full RFI can be found [here](#).

Sources and Additional Information:

- The White House press release announcing the new report and DOD opportunity can be found at <https://www.whitehouse.gov/ostp/news-updates/2023/03/22/fact-sheet-biden-harris-administration-announces-new-bold-goals-and-priorities-to-advance-american-biotechnology-and-biomanufacturing/>.
- The “Bold Goals for U.S. Biotechnology and Biomanufacturing” report is available at <https://www.whitehouse.gov/wp-content/uploads/2023/03/Bold-Goals-for-U.S.-Biotechnology-and-Biomanufacturing-Harnessing-Research-and-Development-To-Further-Societal-Goals-FINAL.pdf>.
- DOD’s press release on its biomanufacturing strategy and RFI is available at <https://www.defense.gov/News/Releases/Release/Article/3337235/dod-releases-biomanufacturing-strategy/>.