

SEPTEMBER 12, 2022

FACT SHEET: President Biden to Launch a National Biotechnology and Biomanufacturing Initiative

Today, President Biden signed an Executive Order to launch a National Biotechnology and Biomanufacturing Initiative that will ensure we can make in the United States all that we invent in the United States. This Initiative will create jobs at home, build stronger supply chains, and lower prices for American families. On Wednesday, the White House will host a Summit on the National Biotechnology and Biomanufacturing Initiative during which cabinet agencies will announce a wide range of new investments and resources that will allow the United States to harness the full potential of biotechnology and biomanufacturing and advance the President's Executive Order.

Global industry is on the cusp of an industrial revolution powered by biotechnology. Other countries are positioning themselves to become the world's resource for biotechnology solutions and products. The United States has relied too heavily on foreign materials and bioproduction, and our past off-shoring of critical industries, including biotechnology, threatens our ability to access materials like important chemicals and active pharmaceutical ingredients. Yet, bioeconomy remains an American strength—as well as a huge opportunity—given our industries, our innovators, and our robust research enterprise. By responsibly harnessing the full potential of biotechnology and biomanufacturing, we will be able to realize the potential of biology that can make almost anything that we use in our day-to-day lives, from medicines to fuels to plastics, and continue to drive U.S. innovation into economic and societal success.

With biotechnology, we can program microbes to make specialty chemicals and compounds, a process called “biomanufacturing.” These advances have led industry to embrace biomanufacturing—as an alternative to petrochemical-based production—to make things like plastics, fuels, materials, and medicines. Industry analysis suggests that bioengineering could account for more than a third of global output of manufacturing industries before the end of the decade—almost \$30 trillion in terms of value.

The Initiative will accelerate biotechnology innovation and grow America's bioeconomy across multiple sectors, including a range of industries, including health, agriculture, and energy. The

Initiative will drive advances in biomanufacturing that substitute fragile supply chains from abroad with strong chains at home, anchored by well-paying jobs in communities all across America. It will improve food and energy security, and drive agricultural innovation while mitigating the impacts of climate change. And it will help people live longer and healthier lives through advances in medicine.

Specifically, the Initiative will:

- **Grow Domestic Biomanufacturing Capacity.** Today, many U.S. bio-companies perform their manufacturing abroad owing to the lack of domestic infrastructure. This Initiative will build, revitalize, and secure national infrastructure for biomanufacturing across America, including through investments in regional innovation and enhanced bio-education, while strengthening the U.S. supply chain that produces domestic fuels, chemicals, and materials.
- **Expand Market Opportunities for Bio-based Products.** The BioPreferred Program is the standard for sustainable procurement by government agencies, both providing an alternative to petroleum-based products and supporting good-paying jobs for American workers. The Initiative will increase mandatory bio-based purchasing by Federal agencies, including through training and support for contracting officers, and ensure that the Office of Management and Budget and the U.S. Department of Agriculture are regularly publishing assessments of progress. In so doing, it will provide specific directions to industry about gaps in biobased product options, leading to the creation of new products and new markets. Together, the Initiative will grow and strengthen the BioPreferred Program, increase the use of renewable agricultural materials, and position American companies to continue to lead the world in bio-innovation.
- **Drive Research and Development (R&D) to Solve Our Greatest Challenges.** Focused government support for biotechnology can quickly produce solutions, as seen with the first-of-their-kind mRNA vaccines during the COVID-19 pandemic. This Initiative directs Federal agencies to identify priority R&D needs to translate bioscience and biotechnology discoveries into medical breakthroughs, climate change solutions, food and agricultural innovation, and stronger U.S. supply chains.
- **Improve Access to Quality Federal Data.** Combining biotechnology with massive computing power and artificial intelligence can produce significant breakthroughs for health, energy, agriculture, and the environment. This Data for the Bioeconomy Initiative will ensure that biotechnology developers have streamlined access to high-quality, secure,

and wide-ranging biological data sets that can drive solutions to urgent societal and global problems.

- **Train a Diverse Skilled Workforce.** The United States is facing a shortage of relevant talent spanning all levels, from community college to graduate school. The Initiative will expand training and education opportunities for all Americans in biotechnology and biomanufacturing, with a focus on advancing racial and gender equity and support for talent development in underserved communities.
- **Streamline Regulations for Products of Biotechnology.** Advances in biotechnology are rapidly altering the agricultural, industrial, technological, and medical products landscape, which can create challenges for developers and innovators. The Initiative will improve the clarity and efficiency of the regulatory process for products of biotechnology so that valuable inventions and products can come to market faster without sacrificing safety.
- **Advance Biosafety and Biosecurity to Reduce Risk.** The Initiative will prioritize investments in applied biosafety research and incentivize innovations in biosecurity to reduce risk throughout the biotechnology research and development lifecycles.
- **Protect the U.S. Biotechnology Ecosystem.** The Initiative will protect the U.S. biotechnology ecosystem by advancing privacy standards and practices for human biological data, cybersecurity practices for biological data, standards development for bio-related software, and mitigation measures for risks posed by foreign adversary involvement in the biomanufacturing supply chain.
- **Build a Thriving, Secure Global Bioeconomy with Partners and Allies.** The Initiative advances international cooperation to leverage biotechnology and biomanufacturing to tackle the most urgent global challenges – from climate change to health security – and to work together to ensure that biotechnology product development and use aligns with our shared democratic ethics and values, and that biotechnology breakthroughs benefit all citizens.

###