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September 8, 2022

The Honorable Joseph R. Biden, Jr.
President
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

Dear President Biden:

The historic investments provided by the Inflation Reduction Act (IRA) to tackle the climate crisis represent a significant step towards your goal of the United States achieving a 50-52 percent reduction from 2005 levels in economy-wide net greenhouse gas pollution in 2030.

As the federal government begins to implement IRA, BIO urges your administration to take additional steps to foster the development and deployment of pioneering technologies that will further reduce greenhouse gas emissions in manufacturing, transportation, and agricultural supply chains to build a stronger, more resilient, and environmentally sustainable economy.

Introduction

BIO[1] represents 1,000 members in a biotech ecosystem with a central mission: to advance public policy that supports a wide range of companies and academic research centers that are working to apply biology and technology in the energy, agriculture, manufacturing, and health sectors to improve the lives of people and the health of the planet. BIO is committed to speaking up for the millions of families around the globe who depend upon our success. We will drive a revolution that aims to cure patients, protect our climate, and nourish humanity. As such, BIO recommends the following actions to strengthen the climate investments made by IRA.

Foster the Biobased Economy

Biotechnology is enabling a dramatic paradigm shift in the production of fuels and chemicals. Modern biorefineries are converting domestic sources of renewable biomass, wastes, and residues into sustainable low carbon fuels, chemicals, and products. In turn, the sector creates high-paying jobs, particularly in rural parts of the country where renewable biomass is grown and in manufacturing communities where carbon can be captured and utilized. Developing and employing domestic feedstocks will help reduce the United States' dependence on foreign energy and create an energy sector that reduces greenhouse gas emissions and enhances human health through improved air quality.

[1] https://www.bio.org/

Sustainable Fuels

IRA's extension of the second-generation tax credit for cellulosic biofuels, the creation of a sustainable aviation fuel (SAF) tax credit, additional funding for blender pumps and other biofuel infrastructure, and its grant program to incentivize production of SAF will support the U.S.'s efforts to reduce emissions throughout the transportation sector. However, given the short duration of these incentives, BIO urges the administration to swiftly implement the tax credits and incorporate up-to-date, science-based modeling to determine eligibility for the SAF credit. Like the U.S. Department of Energy's GREET Model, this SAF credit model should give sustainable fuel producers the ability to raise capital and make the investments necessary to expand biofuel production.

Biobased Manufacturing

While IRA provides substantial investments and incentives for sustainable fuels, the legislation missed an opportunity to make similar investments in biobased manufacturing which uses biology to convert agricultural and other renewable or waste feedstocks into everyday consumer products. These biobased products reduce our dependence on petrochemicals and contribute to a growing a bioeconomy. To deploy biobased technologies and products and create more sustainable supply chains, BIO urges the administration to direct federal agencies and their contractors to buy biobased products.

Towards this end, the Biobased Markets Program, or the BioPreferred® Program, directs federal agencies to increase their purchase and use of renewable chemicals and other biobased products by setting periodic targets. The administration should educate procurement officers on the benefits of BioPreferred® to ensure these procurement targets are achieved.

Also, while the 2018 Farm Bill called for the U.S. Department of Agriculture (USDA) to work with the Department of Commerce (Commerce) to develop North American Industry Classification System (NAICS) codes for renewable chemical manufacturers and producers of biobased products, Office of Management and Budget (OMB) failed to do so. Without dedicated NAICS codes, federal agencies cannot accurately classify, collect data, or report on the rapidly growing biobased economy. BIO urges the administration to have USDA, Commerce, and OMB put forward NAICS to establish a measurement for biobased products to better understand the biobased economy.

Additionally, the USDA Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program (9003 Program) can provide valuable financial assistance to companies seeking to bolster biobased manufacturing in the U.S. through capital projects. However, the lengthy timeframe of review and the onerous application process can be daunting to growing companies that seek to take the next step towards commercialization. Streamlining the

application and shortening the review process can help make 9003 Program attractive to more applicants and stay current with the pace of business and technology.

Leverage the Regulatory System to Quickly Deploy Climate-Positive Biotechnologies

Agriculture continues to play a positive role in tackling climate change thanks to farmers' increased use of biotech tools like precision plant breeding, biostimulants, microbial inoculants, and enhanced animal feed with enzymes. These cutting-edge innovations are reducing emissions and helping domestic producers adapt to a changing environment while bolstering productivity. Yet, it has the potential to yield significantly more environmental benefits if we leverage the regulatory system to quickly review and speed adoption of new technologies that can sustainably grow the economy and help reduce greenhouse gas emissions.

While the federal government has made significant steps to modernize the regulatory system for the use of biotechnology in agriculture and prevent unnecessary barriers to innovation, more can be done. The federal government should continue to streamline the regulatory pathways for breakthrough technology solutions and improve transparency, coordination, predictability, timeliness, and efficiency across agencies.

While USDA has updated its regulatory framework for biotech plants, the agency's incremental approach to exemptions from regulation is overly stringent for plants that could have been produced using conventional breeding. Further updates are needed to ensure that microbial technologies also have a clear, efficient pathway to market.

The Food and Drug Administration (FDA) must issue its guidance on new plant varieties produced using the tools of gene editing and improve its review process of new biotech plant varieties. For example, innovative feed additives and supplements that reduce livestock methane emissions take three to five years to get reviewed by FDA. And while FDA has made efforts to develop a more functional regulatory system for biotech animals that ensures the health and safety of animals, consumers and the environment while fostering innovation, OMB has yet to release its revised Guidance 187 for public review and comment.

Finally, the U.S. Environmental Protection Agency must issue its final rules addressing plant-incorporated protectants developed using newer technologies—including products that increase a plant's built-in pest resistance and reduce the need for pesticide applications.

Supporting Agricultural Innovation

Supporting innovative agricultural biotechnology will be critical to enacting many of the climate-smart agriculture provisions in IRA. BIO believes the government can and should play a catalytic role in providing guidelines for carbon markets. Providing USDA the resources to

establish a carbon sequestration and greenhouse gas emissions quantification program under IRA will help toward this effort. USDA establishing infrastructure to measure and verify carbon sequestrations at the local farm level will ensure both USDA programs and private markets will be successful and operate with credibility. This will also enable producers to invest in and adopt innovative technologies to reduce emissions and be properly incentivized.

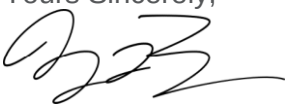
Rewarding producers who use innovative agricultural technologies to reduce emissions, sequester carbon dioxide in soil, improve soil health, and protect waterways can help achieve the priorities IRA has for the Environmental Quality Incentives Program (EQIP). EQIP should support producers who use feed additives to reduce methane from ruminants or enzymes that enhance the digestibility of energy, protein, and phosphorus in livestock. EQIP funds to improve soil carbon, reduce nitrogen losses, and reduce, capture, avoid, or sequester greenhouse gas emissions associated with agricultural production should also recognize and reward the use of agricultural biotechnology products that provide these environmental benefits.

Conclusion

By proactively advancing biotechnology, we can take bold and drastic action to tackle the climate crisis, bolster the climate investments made in IRA, and ensure the U.S. meets its emissions reduction goals. The development and deployment of these technologies will be crucial to reducing emissions in the manufacturing and transportation sectors and helping farmers and ranchers be a part of the solution to climate change by providing them with the tools to be self-sustaining and resilient to a volatile climate.

BIO is committed to working with you and your administration welcomes the opportunity to meet with you and your cabinet officials to further discuss how we can advance pioneering technology breakthroughs to address climate change and improve the health and prosperity of our nation and the world.

Yours Sincerely,



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