

# Food Scientists in the Bioeconomy

The European Commission and the White House say agri-food is critical.

**T**hose advancing the “bioeconomy” as a unique economic driver appear to be including the food & beverage sector and its supply chain.

A recent Executive Order (EO) reflects its growing clout in both North America and Europe. The Sept. 12 order is titled: “Executive Order on Advancing Biotechnology and Biomanufacturing Innovation for a Sustainable, Safe and Secure American Bioeconomy.”

While EOs sometimes do not persist through later administrations, the one issued earlier this month is clear: The bioeconomy has arrived and the government will organize to promote innovation, safety and national security — sometimes simultaneously.

The EO defined the term “bioeconomy” as “economic activity derived from the life sciences, particularly in the areas of biotechnology and biomanufacturing including industries, products, services and the workforce.”

The European Commission defines it as the “production, utilization and conservation of biological resources, including related knowledge, science, technology and innovation, to provide information, products, processes and services across all economic sectors aiming toward a sustainable economy.”

The EU adds that it’s a €2 trillion sector that includes agriculture, fisheries, forestry, bioenergy and

biobased products and that it employs more than 18 million people.

According to a recent EU Bioeconomy Strategy, “Food and farming systems are a fundamental part of the bioeconomy. But they urgently need to be transformed to become more sustainable and nutrition-sensitive,” among other goals.

Many members of the food & beverage sector will recognize themselves in these definitions and goals and see the importance of nutrition and food safety science as firms, academics and government officials grapple with sustainability.

Among other actions, the White House EO will:

- Boost and coordinate federal investment in biotechnology and manufacturing R&D.
- Expand domestic biomanufacturing.
- Train a diverse and skilled leadership and workforce pool.
- Elevate biological risk management — including by providing for research and investment in applied biosafety and biosecurity innovation.

Food professionals will note the emphasis on biological risk management — a food safety priority. In addition, there will be new opportunities to excel in research and biomanufacturing scale-ups as the government rolls out new lexicons, metrics, methods and economic research and resources in response to the EO.

The bioeconomy appears not to be “old wine in new bottles” as it has a focus on renewable resources and sustainable production. In this way, the bioeconomy includes agriculture, fiber and feedstocks for industry. The term bioeconomy also implies that more value is added beyond the production of commodities with a focus on sustainability.

The Institute for the Advancement of Food and Nutrition Sciences’ focus on science in the food & beverage ecosystem lends itself to inclusion in the new thinking about the bioeconomy. It’s clear both U.S. and EU officials are emphasizing nutrition, science and sustainability. IAFNS drives research on these topics, including on sustainable packaging.

While broadly focused on the agri-food sector and sustainability, many of the other topics identified in the EO will be familiar to food sector professionals at IAFNS and elsewhere.

This endeavor is sure to strengthen the leadership of those in the food & beverage ecosystem as resources, science and federal agencies align on safely and sustainably advancing the bioeconomy. ■



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