

## BIOBASED MANUFACTURING

### Biobased manufacturing to advance the biobased economy

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The advancement of the biobased economy can revolutionize industries by creating a value chain of sustainable manufacturing that uses biological processes to convert renewable, low cost, or waste feedstocks into everyday products. A central component to the biobased economy is the development of renewable chemicals to replace ingredients derived from fossil fuels. It creates new markets for crops, crop residues and waste streams, and opportunities for innovation in producing consumer goods.

### Policy Position

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Supportive policy will help reduce environmental impact from manufacturing by driving investment and consumption of renewable chemicals and biobased products.

#### Farm Bill Energy Title

- ❖ The **Biobased Markets Program** (Sec. 9002) gives purchasing preference to cost-competitive biobased products in government procurement and provides a voluntary labeling program to identify certified renewable chemicals and biobased products. Congress must ensure this program is adequately funded and direct USDA to compile a government-wide biobased purchasing compliance report to ensure the program is working as intended.
- ❖ The **Biorefinery, Renewable Chemical, and Biobased Manufacturing Assistance Program** (Sec. 9003) works with rural leaders to reduce risk and secure debt financing for companies developing first-of-a-kind biorefinery technologies. Congress should ensure the program is sufficiently funded to serve this critical financing function.

#### Renewable Chemical Innovation in the Federal Tax Code

Congress should **enact the Financing Our Energy Future Act**, which would enable biofuel, renewable chemical, and carbon capture and utilization projects to use a tax-advantaged ownership structure to form master limited partnerships. BIO supports the **extension of the 45Q tax credits** for carbon capture, utilization, and storage (CCUS) to drive investment and development of innovative new technologies.

#### Renewable Chemical Tax Credits

Congress should establish a renewable chemical tax credit—like many states—to create a targeted, short-term tax credit for production of renewable chemicals or investment in production facilities. BIO will continue to advocate for these incentives both in states and in Congress.

#### Office of Energy Efficiency and Renewable Energy

BIO supports **full funding of DOE EERE programs** that enable the research and development of renewable chemical and biobased technologies. BIO continues to advocate for Congress and the administration to calculate and fully recognize the environmental and climate benefits of renewable chemicals and biobased products to reduce plastic waste.

### Key Points

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- ✓ USDA's "An Economic Impact Analysis of the U.S. Biobased Products Industry" found that the value added to the U.S. economy by biobased products was \$459 billion in 2016, resulting in 4.65 million jobs.
- ✓ Existing renewable and biobased technologies are already providing a solution. USDA found that the development of renewable chemicals and biobased products removed 12.7 mmt of CO<sub>2</sub> from the manufacturing sector in 2016 alone.
- ✓ The World Wildlife Fund found "if existing biotech solutions were used extensively in other traditional industries, such as detergent, textile, and pulp and paper manufacturing, another 52 mmt of greenhouse gas emission reductions would be achieved annually.
- ✓ Substituting the annual global demand for fossil-based polyethylene (PE) with biobased PE would save more than 42 mmt of CO<sub>2</sub>.