



Innovation Ecosystem 2025 Year-End Update

Biobased Products

With the critical support of the Iowa Legislature – and in partnership with **BioConnect Iowa** – Iowa State University of Science and Technology continues to forge new frontiers in innovation supporting the growth of Iowa’s biobased economy.

KEY AREAS OF EMPHASIS FOR 2025

The Biobased Products (BP) platform advanced a major infrastructure project for Iowa, consummating a partnership between **BioMADE**, the Iowa State University Research Park, Iowa State University and the **Iowa Economic Development Authority** for the construction of a **fermentation scale-up facility** that will support biobased products commercialization:

- The facility will be located at ISU’s BioCentury Research Farm (BCRF), and will include one 10,000- and two 5,000-liter fermenters and associated downstream equipment.
- Total project investment is approximately \$40M, with \$20M from BioMADE, \$10M from IEDA and up to \$10M in cost share contribution from Iowa State. BioMADE will manage the facility under a fee for service model. The project will offer de-risking and proof of scalability for companies evaluating a wide range of bioprocessing projects. It will also create more value for Iowa feedstocks and more distributed manufacturing jobs across the state.
- A **groundbreaking ceremony** was held on November 14, 2025, with remarks from Governor Kim Reynolds, ISU President Wendy Wintersteen, and BioMADE CEO Doug Friedman.

- Engineering and construction will occur in 2026 and 2027, with plant operations to begin in late 2027.

The BP platform has played a key support role in the Iowa State-led collaborative proposal known as RuralSTAMINA, which the National Science Foundation **selected as a finalist** in the agency’s Innovation Engine competition. If granted an award – which could be up to \$160 million over 10 years – RuralSTAMINA will provide a major boost to Iowa’s biobased economy and help to further catalyze commercialization of BP-supported technologies.

KEY ACCOMPLISHMENTS AND ECONOMIC IMPACTS

The BP platform continues connecting industry to university faculty to expand and support commercially relevant research at Iowa State. Ten total projects were supported in calendar year 2025 and an additional eight were recently awarded for FY26. Including these most recent grants, the BP platform has funded more than 50 different research projects led by 45 primary investigators, supporting 14 Iowa State startup companies, and partnering with 22 established Iowa-based companies.

BP-supported startups have continued progressing in the market: **Rise Energy** is developing and refining its technology for

converting biomass to fuels and biochar; **Janas Materials** has created a technology for making water-based wood coatings and is scaling up with an Iowa-based coatings company; **SABER Chemical** is in discussions with a sporting goods company for flexible bio-polymer applications; and **SoyLei Innovations** supplied soybean oil-based asphalt additives for a 25-mile construction project in Volga, Iowa.

KEY OPPORTUNITIES AND PRIORITIES FOR 2026

Key priorities for 2026 are continuing to . . .

- Support the RuralSTAMINA NSF Engines project;
- Develop and execute the BioMADE fermentation scale-up facility; and
- Advance the Iowa State startup company pipeline, moving grant projects into commercially viable technologies and connecting researchers to resources.

INNOVATE
at
Iowa State

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