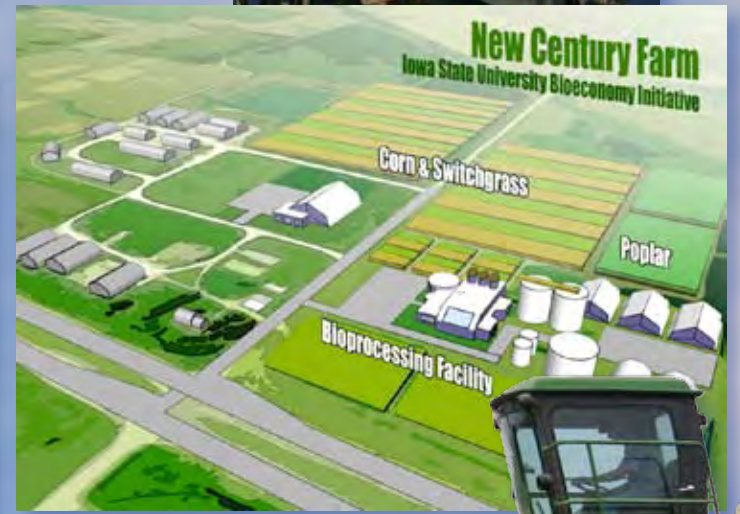


IOWA STATE UNIVERSITY University Extension



Leadership in the Bioeconomy

IOWA STATE UNIVERSITY University Extension

Iowa is rich in the agricultural and industrial assets needed to grow the bioeconomy and has the human resources needed to capitalize on this opportunity. Our renewable resources can be used to foster diverse economic development in rural areas, reduce dependence on fossil fuel resources, improve U.S. energy security, and enhance the health and sustainability of Iowa's ecosystems.

The demand for corn-based ethanol, biodiesel, and cellulosic-based biofuels, and the opportunities for biobased products most likely will change the economic, cultural, and social landscape of our state for years to come.

Leadership in the Bioeconomy

ISU Extension's Role in the Bioeconomy

ISU Extension engages Iowans and provides educational leadership in the development of the bioeconomy in a global marketplace.

ISU Extension connects Iowans and businesses willing to take leadership in the bioeconomy with industry and funding resources that can respond to their needs for research and expertise. Iowa State University's bioeconomy initiative is a cross-disciplinary research, education, and outreach program that

- provides unbiased, research-based information and education about efficient use of biorenewables, and
- supports the emergence of the state of Iowa and ISU as leaders in the new bioeconomy.

ISU Extension has developed educational materials to support the complex information distributed from the university to help Iowans understand the opportunities and possible consequences of the emerging bioeconomy. Extension provides direct programming to clients and internal stakeholders, and carries out applied research projects.

Extension Capabilities

ISU Extension's work in building the bioeconomy in Iowa covers a number of areas including

- providing educational workshops, conferences, and policy forums
- conducting feasibility studies and reviewing business plans to help Iowans secure funding for startup businesses
- bringing together Iowans involved in the production and manufacturing of biobased products to learn about new discoveries in bioprocessing, business models and capitalization strategies, and new crops and cropping systems
- helping firms become certified in the new national biodiesel industry quality standard, BQ-9000
- working with USDA to implement the Federal Biobased Products Preferred Procurement Program (FB4P) designed to open potential federal markets for biobased products

The bioeconomy is part of the bigger picture of ISU Extension's work for economic development. For ISU Extension, economic development is the process of developing, maintaining, and improving economic, social, and political environments to increase the wealth — both financial and quality of life — in a community, region, and all of Iowa.

Extension is well positioned to positively impact local and regional economic development efforts. We have a presence in every county, access to research-based information, and a broad range of expertise across multiple disciplines. Economic development activity cuts across all of ISU Extension's program areas.

Extension's economic development efforts help Iowa address growth challenges in human, community, and business development. ISU Extension impacts economic development — from creating and retaining jobs, and helping businesses get started and expand; to increasing family income, developing Iowans' skills and leadership abilities, and improving quality of life.

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Challenges

As Iowans explore developing the state's biorenewable resources, they must consider the significant economic, social, and environmental ramifications of this rapidly growing initiative. Iowans need to make informed decisions and be engaged in shaping a desirable future. ISU Extension is committed to increasing awareness of the emerging bioeconomy and will be convening community discussions to identify potential opportunities for Iowa as well as possible impacts on quality of life.

Along with the potential for economic growth, Iowans also are faced with many significant challenges that will impact our ability to maintain and improve our quality of life:

- the impacts on crop acreage needs, grain prices, basis behavior, and distillers grain supplies
- the effects of ethanol expansion on Iowa's livestock industry
- the added demands on existing infrastructure such as roads and bridges; carrier services from truck, rail, barge, or pipelines; and public warehousing services
- the design and development of new crop storage and transportation systems
- the need to develop environmentally and economically efficient conversion processes and facilities
- the potential for crop and land use decisions that may harm the environment
- the optimal placement of industrial facilities
- the need to design and manufacture new agricultural equipment

- the availability of, and access to, gas, electricity, and water
- the potential environmental impacts on water systems
- the capacity of ethanol plants to compete or bid for corn and the likely response from crop producers to these prices
- the need to improve performance of biobased products in some applications
- the continued development of a workforce with the necessary education for biobased industries
- the effects on tourism, local communities, and public policy

Such challenges bring a need for unbiased, research-based education and information so Iowans can make good decisions that will positively affect quality of life in this state.

Iowa State University Extension's mission is to extend university knowledge to respond to the needs of Iowans. Foremost in our charge is the economic and community wellbeing that a prosperous and growing Iowa brings to its residents.

As Iowa's economy evolves, citizens are asking questions, and ISU Extension is there, helping Iowans understand these critical issues.

Extension Resources

ISU Extension's Center for Industrial Research and Service (CIRAS) provides Iowa's more than 5,000 manufacturers with educational seminars and individualized technical and business assistance in engineering, management practices, procurement, quality management, biorenewables, and productivity to increase competitiveness. www.ciras.iastate.edu/

ISU Extension Community and Economic Development helps organizations and local governments reach their capacity to make Iowa communities better places to live and work. Extension provides information and education, facilitation, and collaboration to build consensus for organizational and community development. Programs and services are organized around community leadership, community management, and community policy and design. www.extension.iastate.edu/communities/

ISU Extension to Agriculture and Natural Resources serves as a source of unbiased, research-based information and education for farmers and agri-business professionals to maintain the economic base of Iowa agriculture. Ninety-six campus faculty and staff members and forty-eight field specialists work with county extension education directors, agri-business, farm organizations, and service providers to provide information and education to producers. Nine centers based at ISU also support this work. www.extension.iastate.edu/ag/

... and justice for all

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