

Iowa's bioscience industry advantages

Iowa puts your business in the center of a dynamic bioscience industry cluster of over 200 contributing companies that have made \$11.4 billion in capital investment projects in the past 10 years. Iowa's biofuels industry has added \$11.5 billion to its economy, generated \$4 billion in new household income and created and supported over 62,000 jobs.

Consider some of the facts that make Iowa more attractive than ever:

- Iowa's pro-business government works to help bioscience businesses grow through a variety of programs that offer direct financial assistance, tax credit programs including a refundable, R&D tax credit program and bioscience job training funds.
- Iowa is home to three public universities – the University of Iowa, Iowa State University and University of Northern Iowa – that are world-renowned for their dynamic research capabilities in the plant, animal and human biosciences. The universities leverage over \$600 million in cumulative grants, contracts and cooperative research on an annual basis.
- The 2011 Battelle Memorial Institute's Technology Partnership Practice reported that Iowa's bioscience industry is a significant part of the state's economy and positioned for greater expansion.
- Iowa's preeminent position in the development of renewable fuels industry policy is demonstrated by Iowa Governor Terry E. Branstad's position as chair of the U.S. Governor's Biofuels Coalition.

companies at work in Iowa



bioeconomy platform

Iowa is focused on the use of biomass as feedstocks for the production of a broad range of industrial bio-based products including fuels, chemicals, polymers and materials. Iowa leads the nation in the availability of biomass and the most robust industrial biotechnology infrastructure available in the United States. This platform includes two primary subcomponents: advanced biofuels development and value-added biobased chemicals, polymers and materials.

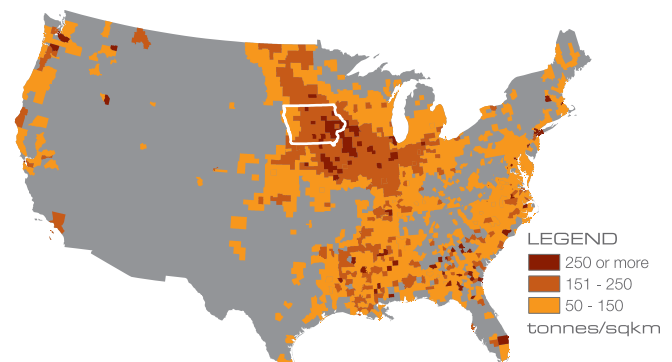
Iowa Research Centers that Support Research and Commercialization:

Ames Laboratory, Center for Biorenewable Chemicals, BioCentury Research Farm, Center for Crop Utilization Research, Center for Bioprocessing and Biocatalysis, BioEconomy Institute, Biobased Industry Center, National Ag-Based Lubricants Center, Center for Biopolymers & Biocomposites

access to raw materials

Iowa provides the nation's second largest supply of biomass with the ability to harvest 14.4 million dry tons of biomass per year (total cellulosic and crop biomass).

Annual Biomass Resources



Source: National Renewable Energy Lab (NREL)



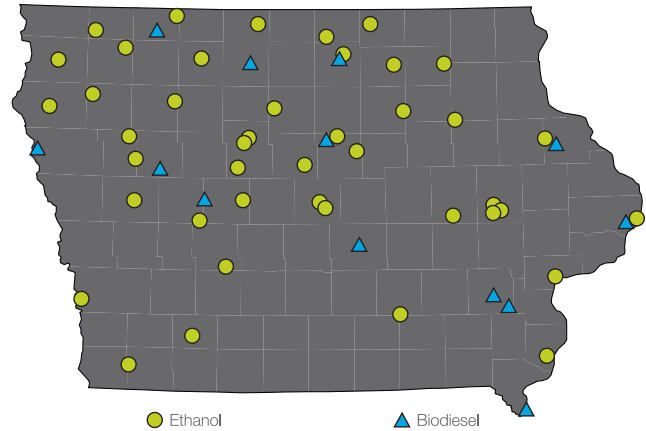
ethanol

- Iowa leads the nation in ethanol production with 43 operating ethanol plants that have a capacity of over 3.9 billion gallons. (Iowa Renewable Fuels Association, 2014)
- Iowa accounts for 27 percent of total U.S. ethanol production. (Renewable Fuels Association, 2014)
- Annual ethanol production increased by 760 percent from 2000 to 2014, from 440 million gallons in 2000 to 3.8 billion gallons today. (Iowa Renewable Fuels Association, 2014)
- Iowa's ethanol industry produced approximately 1.2 billion bushels of distillers grains in 2012, the highest by any state. (Iowa Corn Growers Association)

biodiesel

- Iowa is second in the nation in biodiesel production with 12 biodiesel refineries producing a combined capacity of approximately 315 million gallons. (Energy Information Administration, Iowa Biodiesel Board, 2013)
- Iowa has production capacity to produce over 14 percent of the total U.S. biodiesel capacity. (Energy Information Administration)
- Biodiesel production increased from 25,000 gallons to 325 million gallons annually from 2005 to 2014. (Iowa Renewable Fuels Association, 2014)
- Iowa recently enacted a new sales/use tax refund for biodiesel producers. Producers are eligible to receive a refund on the amount of sales or use tax paid during the production of biodiesel, up to three cents per gallon.

Ethanol & Biodiesel Facilities in Operation



Source: Iowa Renewable Fuels Association, 2014

Iowa has the right chemistry

Iowa's business climate has never been more favorable. Iowa has one of the lowest costs of doing business in the nation, is perfectly positioned with its central location and has a diversified and robust economy. Companies operating in Iowa benefit from a business-friendly state government, business-minded tax incentives and a skilled and productive workforce within a right-to-work state.

To learn more about why Iowa is the right location for your business, contact the Iowa Economic Development Authority by calling **+1.515.725.3100** or visit iowaeconomicdevelopment.com.

companies at work in Iowa



For more information on the Iowa bioscience advantage, contact the Iowa Economic Development Authority (IEDA)
+1.515.725.3100 business@iowa.gov iowaeconomicdevelopment.com