TURNING BIOMASS INTO BUSINESS

lowa is known as a leader in the biofuels industry, thanks in large part to the abundant natural resources available and the support provided by the state to encourage development. Iowa is also a world leader in the production of both corn and soybeans, the principal feedstocks for the biofuels industry. Another great asset – lowa produces the nation's second-largest supply of biomass with the ability to harvest 14.4 million dry tons of biomass annually (total cellulosic and crop biomass). Additionally, lowa can boast one of the most robust industrial biotechnology infrastructures available in the United States.

These assets present a unique opportunity to advance lowa's economy by focusing on the use of biomass as feedstocks for the production of building block chemicals.

In 2016, the Renewable Chemical Production Tax Credit Program became law. The program addresses the unique opportunity to advance lowa's economy by capitalizing on lowa's strengths in the bioeconomy.

BY THE NUMBERS

IOWA RANKS

1st

IN CORN PRODUCTION

2nd

IN SOYBEAN PRODUCTION

_____ Source: USDA, 2022



owa has the **2nd**

14.4 MILLION DRY TONS PER YEAR

Source: USDA, 2017

IOWA LEADS THE NATION IN ETHANOL PRODUCTION WI

41 FACILITIES

PRODUCING 27%
OF THE TOTAL U.S. ETHANOL PRODUCTION

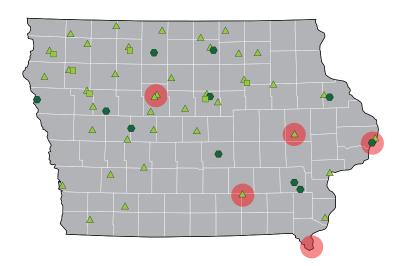
______ Source: U.S. Energy Information Administration, 2022



11 REFINERIES PRODUCING 21%
OF THE TOTAL U.S. BIODIESEL PRODUCTION

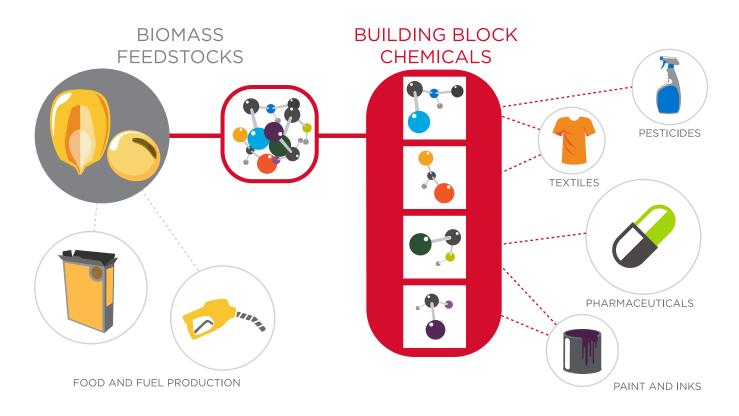
____ Source: U.S. Energy Information Administration, 2022

BIORENEWABLE INFRASTRUCTURE IN IOWA



LEGEND

- BIODIESEL FACILITY IN OPERATION
- ▲ ETHANOL FACILITY IN OPERATION
- CELLULOSIC/AND TRADITIONAL ETHANOL FACILITY
- INDUSTRIAL BIOPROCESSING PARKS



HOW IT WORKS

Many of the industrial facilities around the state currently producing food and fuel products from corn, soybeans and other renewable products also produce certain co-products that can be further processed into higher-value basic chemical compounds. These compounds can be further processed into end-use consumer products such as plastics, textiles, paints or pharmaceuticals.

The production of such biochemicals is perhaps the fastest-growing segment of the bioscience industry and represents one of lowa's best opportunities for development of a high-density industry cluster such as Silicon Valley.

PROGRAM DETAILS

In 2004, the U.S. Department of Energy studied the potential for high-value chemicals from biomass feedstocks and identified the 30 chemicals that hold the most market potential. This list forms the foundation of the program that is administered by the Iowa Economic Development Authority.

This program aims to incentivize the production of high-value building block chemicals based on weight (\$0.05 per pound produced) with annual limits of \$1 million for startups and \$500,000 for established businesses.

Program rules and application process are available at: iowaeda.com/innovate/renewable-chemicalproduction-tax-credit/.

To speak with a project manager regarding this program, contact the Iowa Economic Development Authority (IEDA) opportunities@iowaeda.com +1.515.348.6200 iowaeda.com

JG 03142023