

SUSTAINABLE FUTURE FOR

BIOFUELS



THE CHALLENGE:

In Chicago and other parts of Illinois, between 40% and 70% of air pollution comes from mobile transportation. Plus, petroleum-based fuels are a finite resource. And yet, U.S. energy consumption is expected to grow up to 50% in the next decade.

A SOLUTION:

Biofuels are made in part from corn and soybeans, a locally grown, renewable energy source. Plant-based biofuels can reduce emissions by up to 47%.

HOW WE GET THERE:

Illinois farmers like Elliott Uphoff are growing this solution right in their fields. Elliott is committed to not only responsibly growing a crop that can fulfill our biofuels needs, but he also uses that biofuel in his day-to-day farming operation.

Biofuels are grown right in our backyard. We don't have to go searching for them or drill for them. We can look out our back window and see it growing in our fields.

ELLIOTT UPHOFF
Farmer from Shelbyville

RAISING PIGS

THE CHALLENGE:

Illinois' natural resources – land, water and air – are critical to a sustainable food supply.

A SOLUTION:

Illinois is uniquely suited to raising crops and livestock – and in a harmonious way that lowers the carbon footprint of food production by using the principles of reduce, reuse and recycle.

HOW WE GET THERE:

Chad Bell is a Viola pig farmer putting these principles to work. A modern barn allows him to raise more pigs using a smaller land footprint while providing better animal care. Homegrown corn and soybeans provide high-quality feed for his pigs. This local feed creates local pork, and the the cycle repeats when manure is recycled as a natural fertilizer for growing next year's crops.

In the last 50+ years, for every pound of pork, pig farmers use 25% less water, 7% less energy, almost 8% less carbon and 75% less land.



BIOPLASTICS

One million plastic bottles are purchased every minute around the world; 91% of THE CHALLENGE: those are never recycled. Petroleum-based plastic never decomposes, posing an ongoing pollution threat.

A SOLUTION:

Any petroleum-based plastic can be replaced with corn-based bioplastics, which reduce the amount of fossil fuels we need and support local farm families growing a renewable, carbon-reducing resource - corn.

HOW WE GET THERE:

Alexis Hartman is a Gen Z and soon-tobe sixth-generation corn farmer on her family's farm in Waterloo. She recognizes the imminent need for a solution to this problem and is doing her part on the farm to grow this important crop.



BETTER INRLD

These are just a few of the farmers adopting better technology, better practices and better solutions to overcome some of the challenges faced by our society. Follow along with these stories and others at WatchUsGrow.org/innovation-grows-here.

SOLUTIONS WE'RE EXPLORING

Pollinator habitat **Carbon sequestration Dairy sustainability** Beef's role in regenerative agriculture Pesticide use on farms **Biofuels** The 3 Rs of pig farming Weather and technology **Bioplastics**







Talk about a group of people who have adopted technological advances very, very quickly. Farmers are using data to drive decisions. And when they do that, they change with their crop, they change with the climate, and they change with technology.

> **ERIC SNODGRASS** Principal Atmospheric Scientist **Nutrien Ag Solutions**

CHANGE



2 inches has doubled in Illinois. Weather patterns are THE CHALLENGE: changing, and weather is the No. 1 factor that will contribute

to or detract from a farmer's potential crop yield. If Illinois

Since 1980, the number of days it has rained more than

crop yields underperform, the whole world feels it.

Farmers combine the latest technology, data analysis and A SOLUTION: on-farm practices to manage the risk and impact of changing

weather patterns.

Sarah Hastings has adopted conservation practices to mitigate high rainfall events: Waterways control the flow of water through her fields; filter strips, grassy patches along riverbanks, filter out soil loss or erosion; and reduced tillage

slows water flow through fields so soils can absorb it and

keep it from running into creeks.

HOW WE GET THERE:



WE ARE ILLINOIS FARM FAMILIES

The Illinois Farm Families® (IFF) Coalition is made up of farmers who want to share how food is sustainably grown and raised. These families share their own experiences and stories about what happens on their farms.

We're here to answer questions about food and farming, sharing resources through our website, social media channels and other communications tools. Want to learn more? Meet us at WatchUsGrow.org.

The work of Illinois Farm Families is made possible through its six-member coalition, as well as the countless Illinois farmers who dedicate their time to supporting the effort.

















