

Further Down the Supply Chain

THE CORN INDUSTRY'S COMMITMENT TO SUSTAINABILITY

Processing Capabilities

Corn production has made great strides in sustainability while increasing productivity over the last several decades. While the focus at the front of the supply chain is on continuous improvement for farmers, the same can be seen for those downstream, especially in the types of products corn is processed into.

Between 1980 and 2015, corn farmers have:



REDUCED SOIL
LOSS PER ACRE BY

58%



IMPROVED IRRIGATION
EFFICIENCIES, LEADING
TO PER BUSHEL
DECLINES IN IRRIGATION
WATER USE OF

46%



DECREASED THE
AMOUNT OF LAND
REQUIRED TO
PRODUCE A BUSHEL
OF CORN BY

41%



IMPROVED ENERGY
USE EFFICIENCY
PER BUSHEL BY

41%



REDUCED
GREENHOUSE GAS
(GHG) EMISSIONS
PER BUSHEL BY

31%

Source: Field to Market Indicators Report, 2016

WHY CORN?

Corn and corn co-products can serve in a multitude of roles. Food, Feed and Fuel tend to get the most attention. But, corn also serves a role in supplying biobased products replacing petroleum in a number of areas. There's plenty of corn to go around.

Versatile

Did you know corn's kernels are made of starch, protein and fiber and oil? This delivers versatility in a wide range of uses.

Paper coatings, fabrics, carpeting, cups, and 3-D printing inks are a few of the products using corn-based biopolymers.

Corn replaces petroleum in a number of chemical applications.

Technology continues to expand with a focus on performance and affordability.



Sustainable

Despite corn's use in food, feed and fuel, there is still room to meet demands from biobased industries.

Industrial biotechnology is poised to use biomass-based products as chemical building blocks.

Consumer interest in replacing petroleum with biomass-based compounds continues to grow.

Research expands to ensure these products are equal to or better than their predecessor.

INVESTING IN THE FUTURE

The corn industry is committed to finding additional opportunities to expand its sustainability footprint. Take, plastics for example. There are many types of plastics, but the most common ones are made with petro-based ethylene. They hold the potential to be replaced with corn sugar-based ethylene to provide a product that keeps food fresher, boasting better barrier and thermal properties (CO2 and O2) and has improved moisture resistance.

FUTURE POTENTIAL FROM CORN-BASED ETHYLENE



Grocery Bags



Water bottles



Building Blocks



Nylons



Styrofoam



Clear takeout containers

THE POWER OF AND

Corn's versatility added to its availability and affordability making it a smart choice for food AND feed AND fuel AND biobased products. Corn processing continues to find efficiencies and reduce waste.

WHAT YOU GET FROM A BUSHEL OF CORN



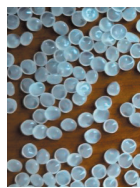
33 LBS.
SWEETENER

OR



31 LBS.
STARCH

OR



22 LBS.
PLA FIBER/
POLYMER

OR



AVERAGE DRY-GRIND ETHANOL PROCESS

2.9 GALLONS
FUEL ETHANOL

0.8 LBS.
DISTILLERS CORN OIL

15.2 LBS.
DISTILLERS DRIED
GRAINS (DDGS)

1.1 LBS.
BIOGENIC CO2