

# INTERNATIONAL TRADE: OPPORTUNITIES, BENEFITS AND OUTLOOK

**Corn Refiners Association 2015 Annual Report**



# Table of Contents

President's Letter.....	1
<i>John W. Bode, President &amp; CEO, Corn Refiners Association</i>	
State of the Industry .....	2
<i>Richard N. Kyle, Chairman, Corn Refiners Association</i>	
A World of Opportunities: Keeping American Agriculture Competitive through Free Trade.....	6
<i>Tom Vilsack, Secretary, U.S. Department of Agriculture</i>	
Trade – Opportunities for Corn Refiners, Benefits for All .....	8

## Corn Industry Statistics

Shipments of Products of the Corn Refining Industry - 2014 .....	3
U.S. Corn Refining Industry at a Glance - 2014.....	4
Exports of Products from Corn - 2014 .....	11
2014 Safety Program Winners .....	12
Corn Refiners Association Member Companies' Products .....	13
Corn Refiners Association Member Companies' Domestic and International Plant Locations.....	14



# President's Letter

*John W. Bode, President & CEO, Corn Refiners Association*

Global food demand is growing rapidly and more than 95 percent of the world's consumers live outside U.S. borders.

This is an economic and humanitarian challenge rich with promise for the United States corn industry. The U.S. tends to have ideal corn growing conditions, which are complemented by the strength and innovation of American agriculture. U.S. corn farmers consistently produce more corn than any other country in the world. Further, no one processes and transports their agricultural bounty with the efficiency of the U.S. Barring barriers to trade, the U.S. corn industry will play a major role in meeting global food demand, which would benefit both the U.S. and its trading partners.

By recognizing areas of comparative advantage where efficient and effective production is at its peak, consumers and national economies everywhere can benefit from trade liberalization. Free trade increases access to higher-quality, lower-priced goods. It allows for improved efficiency and innovation, because market processes shift workers and resources to more productive uses. It drives competitiveness, because industries adapt to the shifting demands of the global marketplace. And, free trade promotes fairness. When all parties follow the same rules-based system, there is less opportunity for cronyism, or the ability of participating nations to skew trade advantages toward favored parties.

The U.S. corn refining industry fully embraces this point. Our industry is a champion of international trade. We respect and uphold our commitments under trade agreements and follow the rules of practice and procedure. We are proud to be respectful trading partners and leading

advocates for all countries, particularly the U.S., in honoring international trade obligations.

Since the North American Free Trade Agreement (NAFTA) took effect in 1994, agricultural trade and investment between the United States, Canada and Mexico exceeded expectations. During the period between 1993 and 2011, U.S. agricultural exports to Canada and Mexico rose by 258 percent and 408 percent, respectively. For our industry alone, since the agreement was implemented, exports to our NAFTA partners have more than tripled.

Working with the U.S. Grains Council, I was privileged to hold meetings in Japan in June of this year, and then deliver a presentation at the Starch Asia Conference in China. In that presentation, I outlined the Corn Refiners Association's objectives in formation of the International Starch Forum.

We intend for the International Starch Forum to promote a robust industry dialogue in which we can identify and discuss common industry challenges and support common objectives including:

- domestic and international policies that avoid trade disruptions;
- policies that adhere to international trade obligations; and
- health, nutrition and regulatory policies that are based on sound science.

In this edition of the *Corn Annual*, we explore the numerous near and long term opportunities for increased trade, as well as the benefits of trade to corn refiners, local communities and trading partners in terms of jobs, economy and food security. Existing agreements, such as NAFTA, demonstrate the potential of future trade agreements.



# State of the Industry



*Richard N. Kyle, Chairman,  
Corn Refiners Association  
Vice President, Strategic Business  
Planning, Ingredion Incorporated*

While a majority of the refined corn products produced in the U.S. are used domestically, many overseas markets have come to rely on the quality, value and availability of our products. Approximately 4.83 million metric tons of refined corn products and animal nutrition products were shipped internationally in 2014, adding more than \$2.55 billion to our balance of trade. Export volume and value were down year over year; however, looking at a 5-year trend we see export volume up 34 percent and the value of refined corn exports up over 57 percent.

And in a nod to our suppliers, America's corn growers remain the most abundant and reliable global supplier of corn. In 2014, they produced the largest crop on record, 14.22 billion bushels. Further, corn refiners used over 1.55 billion bushels of corn this year — 50 million bushels more than the previous year — worth approximately \$6.21 billion.

Many corn refining companies operate in multiple locations across the globe and continue to increase their international portfolios. Even though corn refiners have a strong global presence, many international markets still need high-quality refined corn products and our industry has the capacity to meet this demand. It's important to note that this increased market access relies on sound trade policy.

The following issues are of top importance to the corn refining industry and highlight the breadth of issues the Corn Refiners Association (CRA) works on throughout the year.

*Corn refiners used over 1.55 billion bushels of corn in 2014 — 50 million bushels more than the previous year — worth approximately \$6.21 billion.*

## INTERNATIONAL TRADE

2015 saw trade issues take the international spotlight. CRA celebrated the signing of Trade Promotion Authority (TPA) legislation into law in June. TPA is an important element of opening new markets by empowering the executive branch to negotiate trade agreements that face an up-or-down vote by Congress, rather than being subject to numerous revisions and special interests. TPA increases the credibility of U.S. negotiators and encourages trading partners to present better terms that result in positive agreements for the nation.

Ongoing negotiations for the Trans-Pacific Partnership (TPP) and the Transatlantic Trade and Investment Partnership (TTIP) agreements will benefit

from TPA's successful passage.

The 11 countries negotiating TPP are important customers for U.S. exports of refined corn products as they account for nearly 46 percent of total exports by our industry. Japan's participation in TPP is of particular interest to corn refiners; if negotiations are successful, we will have increased market access for starches and sweeteners.

While the negotiating process is in its early stages, CRA is optimistic about the potential for TTIP. For many years, the EU was our largest export market for corn gluten feed. However, differing opinions and policies on biotechnology drastically reduced the size of this significant market that peaked in 1995 at 6.3 million metric tons, and valued at \$672 million (over \$1 billion if adjusted for inflation). Important components of TTIP will address technical barriers to trade and EU biotech regulations that impede market access.

At the end of 2014, the U.S. and Cuba announced they would restore diplomatic relations. Cuba has the potential to be an important market for U.S. refined corn products,

primarily for feed, pharmaceutical and food industries. While the U.S. is making progress in its relationship with Cuba, lifting the trade embargo will take time, as will Cuba's development of the appropriate infrastructure, regulatory and banking terms that are needed to support trade. The association is a member of the U.S. Agriculture Coalition for Cuba (USACC) that seeks to advance trade relations by re-establishing Cuba as a market for U.S. food and agriculture exports. With the U.S. and Cuba re-opening embassies in July of 2015, a small, but positive, step forward was made towards these efforts.

While many of CRA's trade-related activities support opening markets, we must also strive to protect current export markets. A significant threat to our top two export markets, Canada and Mexico, is the ongoing dispute over Country of Origin Labeling (COOL) rules for muscle cuts of meat. The World Trade Organization (WTO) issued a final ruling on the dispute in favor of the arguments made by Canada and Mexico that COOL distorts trade. The WTO ruling allows Canada and Mexico to advance billions of dollars' worth of retaliatory tariffs on U.S. food, agricultural

## Shipments of Products of the Corn Refining Industry – 2014 (pounds\*)

Starch Products <i>(includes corn starch, modified starch and dextrins)</i>	5.85 billion
Refinery Products <i>(includes glucose syrup, high fructose corn syrup, dextrose, corn syrup solids, maltodextrins)</i>	30.27 billion
High Fructose Corn Syrup 42%	7.06 billion
High Fructose Corn Syrup 55% and Above	11.47 billion
Total High Fructose Corn Syrup	18.53 billion
Total — Domestic Basic Products	36.23 billion
Total — Export Basic Products	4.31 billion
Corn Oil — Crude and Refined	1.01 billion
Corn Gluten Feed and Corn Oil Meal	11.59 billion
Corn Gluten Meal	2.09 billion
Steepwater	3.14 billion

Compiled for the Corn Refiners Association by Veris Consulting, Inc. Statistics represent shipments by members of the Association.  
\*Shipments are in pounds, commercial weights, and do not include co-products derived from ethanol production.



and manufactured goods. Refined corn products are targets of both countries. If Congress fails to pass corrective legislation, hundreds of millions in export sales of refined corn products will be lost, business facilities will close, and jobs will be lost. As a member of the COOL Reform Coalition, CRA continues to work with Congress on this important issue.

## SCIENCE & POLICY

Dedication to science-based policy is the driving force behind many of the association's activities. Over the past year, CRA has advocated for science-based policies on environmental, food biotechnology and nutrition policy issues.

CRA is working with the American Alliance for Innovation to seek modernization of the Toxic Substances Control Act (TSCA). TSCA provides the U.S. Environmental Protection Agency (EPA) with authority to require reporting, testing requirements and restrictions relating to chemical substances. It addresses the production, importation, use and disposal of specific chemicals used in the refining of corn products. Technology has drastically changed since

TSCA was enacted in 1976, and it needs to be modernized in order to be compatible with current technology. Congress is making progress on legislation to revise TSCA so that the law ensures the safe use of chemicals, encourages product development, and protects American jobs.

This August, President Obama and the EPA announced the Clean Power Plan, a set of rules designed to reduce greenhouse gas emissions from power plants. While the rules do not directly regulate operations at CRA member facilities, they do include important provisions regarding the treatment of biogenic carbon dioxide (CO<sub>2</sub>) emissions associated with processing agricultural crops and using crop-derived waste as fuel. The rules set precedents for how biogenic CO<sub>2</sub> emissions will be treated in later rulemakings that will impact both the industrial boilers and the corn processing facilities operated by CRA members. CRA is actively engaged with EPA and other stakeholders, and manages the Biogenic CO<sub>2</sub> Coalition, a group of allied industries that is seeking fair and science-based regulation of biogenic CO<sub>2</sub> emissions.

As a steering committee member of the Coalition for Safe

## U.S. Corn Refining Industry at a Glance—2014

Corn Refining Plants	27
Additional Processing Plants*	6
Location	11 states
Corn Grind	1.55 billion bushels
Value of Corn Purchased	\$6.21 billion
Number of Corn Suppliers	41,000
Employment by CRA Member Companies	65,300**
Capital Investment (replacement value)	\$18.20 billion
Major Products (estimated)	
Sweeteners (dry weight)	25.94 billion pounds
Starches	6.89 billion pounds
Ethanol	1.37 billion gallons
Co-products	27.18 billion pounds
Value Added by Manufacture	\$10.21 billion

\*Includes specialty product refinement facilities. Plants do not grind corn.

\*\*Includes employees that provide services in non-corn refining areas.

Compiled by the Corn Refiners Association based on 2014 data from the U.S. Department of Agriculture, Bureau of Labor Statistics, LMC Commodity Studies, Renewable Fuels Association, press reports, and industry data compiled for CRA by Veris Consulting, Inc.

Affordable Food, the association continues to advocate for a national policy on labeling of food produced through biotechnology. As states develop and implement labeling laws, companies will be forced to create multiple supply chains, warehousing and delivery mechanisms. As a result, this has the potential to raise food costs and create a stigma around biotech foods. Making its way through Congress is a bipartisan bill that would establish a federal certification and labeling program through the Department of Agriculture. The House passed the Safe and Accurate Food Labeling Act this summer and there are positive signs for support in the Senate. The Coalition continues to promote science-based information about biotech foods, demonstrate the benefits for consumers and the environment, and highlight the safety of biotech.

The Dietary Guidelines for Americans (DGA) serve as the cornerstone for all federal nutrition education and program activities, and the findings have a profound impact on future federal food policy and recommendations. It is imperative that only the strongest, best available evidence is used to inform and set policy. Concerned by observations of poor-quality scientific evidence and political agendas, the CRA supported efforts to encourage Congressional oversight of the 2015 DGA. Congress responded with appropriations language to halt implementation of the 2015 DGA unless it is solely nutritional and dietary in nature and based on the highest caliber of scientific evidence. CRA will continue to work with strategic allies to advocate for a strengthened scientific basis for federal dietary guidance.

## FACTS & RESEARCH

The association strives for scientific integrity and has a strong commitment to high quality research. A group of highly-esteemed, independent experts sits on the association's Scientific Advisory Panel (SAP), which is tasked with providing advice on scientific matters and guiding the CRA's research activities.

Recently, much attention has been placed on sugars and health in the scientific community that has resulted in a rise in research in this area. In 2014, CRA-sponsored research on sugars equivalence with regard to cardio metabolic risk factors, lipid profiles and dietary quality were published in prestigious, peer-reviewed journals, including *Food and Nutrition Sciences*, *Nutrients* and the *International Journal of Obesity*.

The future success of corn refiners rests on innovative, scientific minds. Fostering the best research will help maintain scientific integrity across our industry.



# A World of Opportunities: Keeping American Agriculture Competitive



*The Honorable Tom Vilsack,  
Secretary, United States  
Department of Agriculture*

America's farmers, ranchers and rural communities are more prosperous and successful today thanks to strong trade agreements. Exports generate more demand for U.S. goods, boost farm income and support new jobs. That all translates into new opportunities for rural communities.

Last year, American agricultural exports, including corn and corn products, grew to a record \$152.5 billion and the past six years represent the strongest in history for U.S. agricultural trade. The U. S. accounts for nearly one-third of global coarse grain exports. In addition, expanding exports of livestock products further expand demand for U.S. corn and other animal feeds.

To achieve this success, corn farmers and corn processors rely on free trade agreements that open foreign markets. Ninety-five percent of the world's consumers live outside of our borders, and the only way to reach them is through expanded trade agreements that treat U.S. products and producers fairly. Congressional approval of Trade Promotion Authority earlier this year was a step in the right direction. With this authority, U.S. negotiators are now able to drive the best bargain possible when dealing with foreign countries.

Now, we need a global Trans-Pacific Partnership (TPP) Agreement that will bring down specific barriers that have been holding back U.S. agricultural exports. For example, currently, tariffs on some corn products in Japan can be 20 percent or higher. The tariff on beef can go as high as 50 percent and tariffs on pork and dairy can reach triple digits.

Without a TPP Agreement, U.S. exporters will be further exposed to competitive disadvantages in these markets. Australia, New Zealand, Mexico and Chile already have negotiated preferential agreements, which means that their products face lower tariffs than U.S. exports. Canada, the European Union and others are working to close their own agreements, leaving the United States further behind.

The United States is also negotiating with the European Union under the





# Through Free Trade

Trans-Atlantic Trade and Investment Partnership (TTIP). The European Union is a priority market for U.S. exporters, but high tariffs and burdensome non-tariff measures have restricted our access, stagnating American agricultural trade in these markets. Additionally, EU agreements with third countries provide tariff preference to U.S. competitors, which put our exporters at a disadvantage.

TTIP has the potential to unlock better access for American products into this market. EU tariffs now are more than twice the level in the United States, and tariffs for a number of our top exports, including livestock products are in the triple digits. The EU charges tariffs on some corn products, such as the 25 percent duty on ethanol.

Tariffs are only part of our challenge. For many of our top exports, including corn and livestock products, we are denied access to the European Union, because our production or processing practices are different from those in the EU. For example, the EU has a slow and unpredictable process for approving new biotech events, which has been a particular problem for our corn and corn product exports, which have fallen to negligible levels.

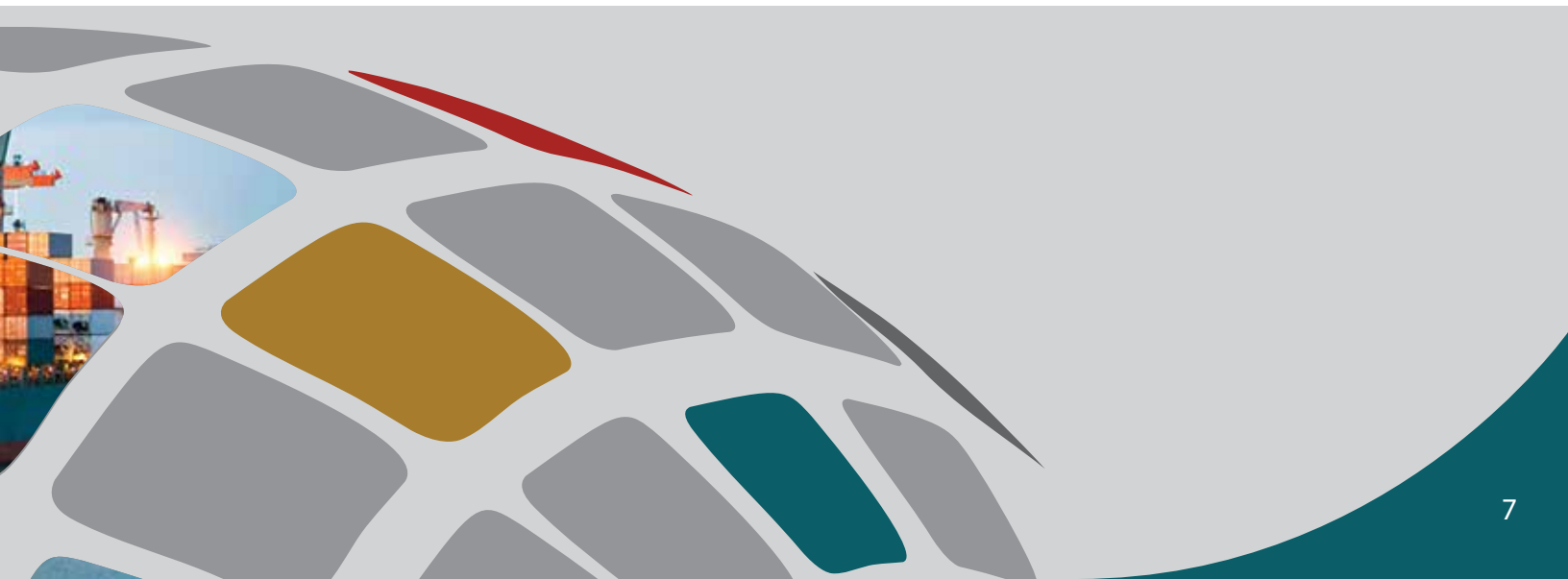
U.S. food is the safest in the world, and our farmers are conscientious stewards of the land. Gaining EU recognition of these facts is an important part of the discussion. Our objective is to work together with the EU to develop an agreement that recognizes sound regulatory objectives in TTIP, which will serve as a positive example for third countries.

The only common language between us—science—should be the basis for deciding what is safe and legal. From there, let the producer decide how they want to farm and the consumer decide how they want to eat, rather than having choice made for them by unnecessary regulatory restrictions.

Agricultural producers and businesses thrive when they can operate in a secure business environment. The more predictable, transparent and reliable international markets are, the better chance U.S. producers have to access customers and compete fairly on price, quality and service.

Reducing these barriers will help our exports be more competitive in the markets of the Trans-Pacific Partnership and Trans-Atlantic Trade and Investment Partnership countries, benefiting American workers, farmers and manufacturers, creating jobs and strengthening national security.

And new trade agreements benefit more than just the segment of the American population directly involved in producing our food. Expanded export opportunities also benefit the packers, processors, shippers and others employed at every step in the production chain. Agricultural exports support more than one million American jobs. Moreover, additional farm income and agribusiness jobs generate more cash flow in rural economies, supporting local businesses on Main Street. In parts of rural America, these jobs are critical to preserving our small towns and rural way of life.



# Trade – Opportunities for Corn

International trade supports **millions of American jobs**, drives economic growth and increases global competitiveness. The United States ranks first in world arable land area and is one of the most productive and largest producers of agricultural commodities. **America's corn farmers rank first in productivity and harvest more than half of the world's corn production.**

The U.S. corn refining industry is a key player in international markets due to the abundance and quality of our feedstock. Exports of refined corn products account for nearly 20 percent of total shipments. Many industries rely on U.S. refined corn products for their **consistent quality and superior performance**. Emerging markets' increasing demand for convenient and nutritious prepared foods and industrial goods present new opportunities for U.S. corn refiners. In developed countries, regional trade agreements will be a significant factor in expanding export markets.

## **BENEFITS OF TRADE**

U.S. agricultural exports support more than 1 million jobs both on and off the farm, and contribute hundreds of billions of dollars to the gross domestic product. According to the U.S. Department of Agriculture's Economic Research Service (USDA ERS), every \$1 billion in agricultural exports supports more than 7,500 jobs. This includes transportation workers, food processors, sales and marketing representatives, packers and longshoremen. Exports provide job security for well-paid positions in the corn refining industry and further economic growth in the rural communities where refining plants are located.

The benefits of trade trickle through many different sectors to generate economic growth. Based on 2013 data, USDA ERS estimates that for every \$1 of agricultural exports, another \$1.22 is generated in business activity.

Trade not only broadens supply sources and strengthens competition, which expands choice and lowers prices for

# Refiners, Benefits for All

consumers, but trade is also essential to global food security. Agricultural trade helps fill the gap when local production is not sufficient to meet demand. In countries that need dependable and safe sources of nutrition, agricultural trade can contribute to political stability and help raise standards of living.

## TRADE AGREEMENTS IN EFFECT

The North American Free Trade Agreement (NAFTA) was an integral step in expanding U.S. trade policy. Prior to NAFTA, the U.S. only had one trade agreement with Israel, which went into effect in 1985. In 1994 when NAFTA took effect, there were roughly 40 trade agreements between other nations. Twenty years later, the U.S. now has free trade agreements (FTAs) with 20 countries, and there are more than 270 agreements between other nations. This puts the U.S. at a competitive disadvantage when other countries negotiate agreements that lower tariffs among participants, but remain high for U.S. goods and services.

Examples of growth experienced under FTAs demonstrate the potential for future agreements to expand refined corn export markets.

### NAFTA

Trade of refined corn products under NAFTA has flourished. Exports to Mexico and Canada have grown

from 12 percent of all refined corn exports to more than 30 percent in the 20 years since the agreement was implemented. From 1993 to 2014, exports to NAFTA partners have increased from 392,794 metric tons to 1.89 million metric tons valued at more than \$843.3 million.

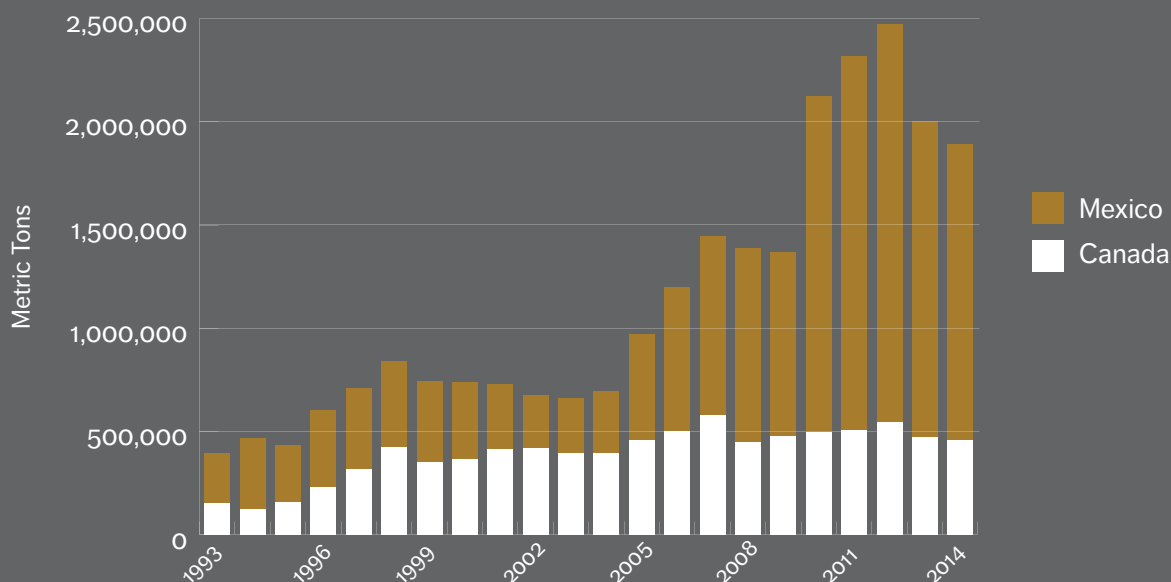
### CAFTA-DR

The Dominican Republic-Central America Free Trade Agreement (CAFTA-DR) is a multilateral agreement with Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and the Dominican Republic. Since the agreement was implemented in 2005, exports of refined corn products to CAFTA-DR countries have more than doubled from \$20.9 million to \$42.1 million in 2014 with corn syrup and corn gluten meal (CGM) as the leading exports.

### CHILE

The United States-Chile Free Trade Agreement went into effect in 2004. U.S. corn gluten meal is important to the Chilean salmon industry and to the production of other protein sources such as poultry and pork. Exports of CGM reached a high in 2014 at 133,215 metric tons, worth \$100.3 million. Chile is now our third largest market for CGM. Total volume of exports of refined corn products to Chile has increased 45 percent from 99,511 metric tons in 2003 to 144,064 metric tons, worth \$107.8 million, in 2014.

Volume Exports U.S. Refined Corn Products to NAFTA Partners



## KOREA

Under the United States-Korea Free Trade Agreement (KORUS), duties on corn gluten feed (CGF) and CGM were immediately eliminated. In 2011, prior to the effective date of the agreement, there were no exports of corn gluten meal to Korea; however, the industry exported 6,294 metric tons, worth \$4.6 million, in 2014. In addition, exports of CGF have increased by over 4,000 percent since the implementation of KORUS with shipments reaching 48,943 metric tons, worth \$11.7 million, in 2014. Overall, export volume has increased more than 400 percent since the agreement went into place. Corn refiners shipped 68,938 metric tons of products, worth \$28.3 million, in 2014.

## COLOMBIA

Since the U.S.-Colombia Trade Promotion Agreement entered into force in May 2012, Colombia has become the largest U.S. market for agricultural exports within South America. In just three years, exports of refined corn products to Colombia have grown 45 percent from \$59.5 million in 2011 to \$86.2 million in 2014. Duties on feed products were immediately eliminated, which has

resulted in substantial gains. Exports of corn gluten meal have grown 70 percent reaching 78,968 metric tons, worth \$59.9 million, in 2014. Shipments of corn gluten feed to Colombia have increased 57 percent. CGF exports were 21,990 metric tons, worth \$3.7 million.

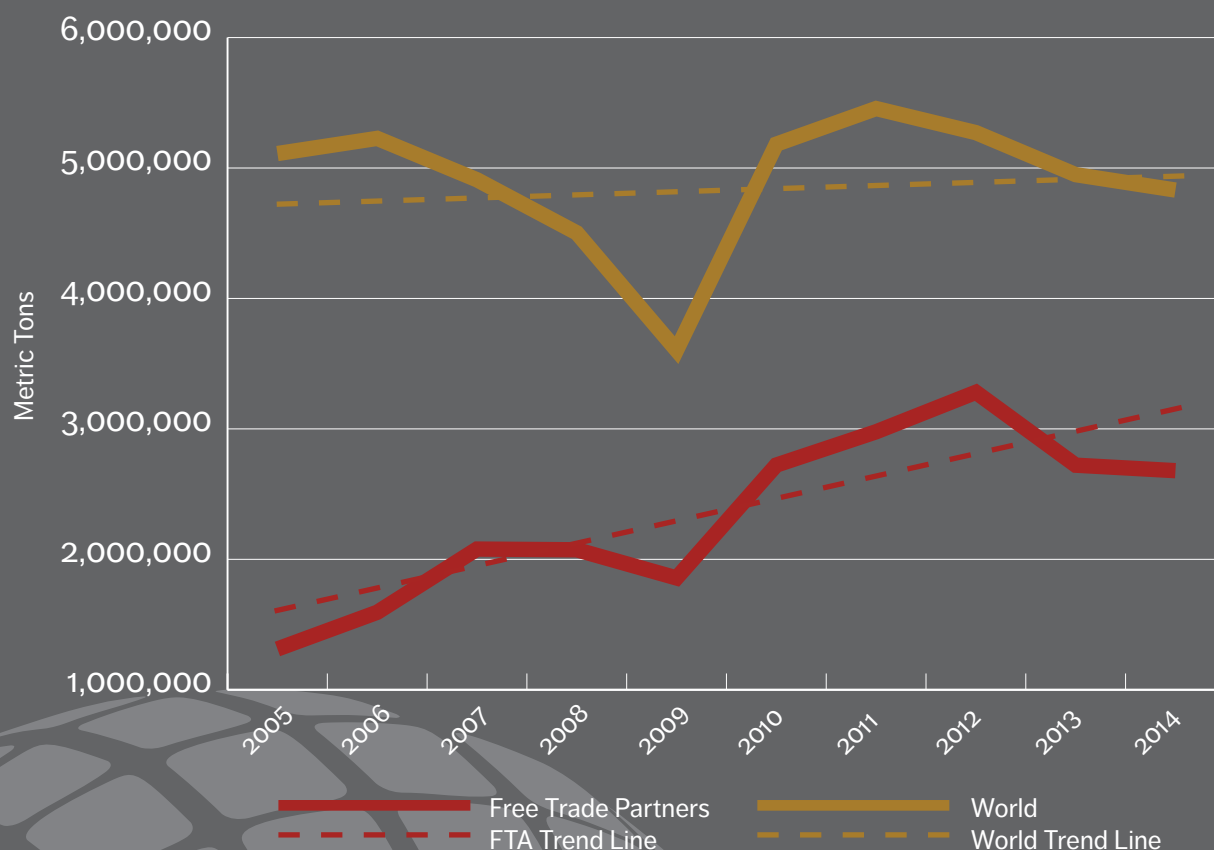
## TRADE AGREEMENTS UNDER NEGOTIATION

Free trade agreements are critical to the expansion of refined corn product exports. Exports to FTA partners have averaged an annual nine percent growth over the past ten years compared to total exports. Successful negotiation of the Trans-Pacific Partnership (TPP) and the Transatlantic Trade and Investment Partnership (T-TIP) will expand export markets and promote job growth.

## TRANS-PACIFIC PARTNERSHIP

TPP would build upon the United States' existing trade agreements with Australia, Canada, Chile, Mexico, Singapore and Peru, and forge new opportunities for exports to Brunei, Japan, Malaysia, New Zealand and Vietnam. According to a study by USDA ERS, the value of agricultural exports among TPP partners could increase

U.S. Refined Corn Exports - Free Trade Partners vs Total



Source: U.S. Census Bureau Trade Data.



six percent, with the U.S. supplying 33 percent of the expansion and Japan accounting for 70 percent of import growth.

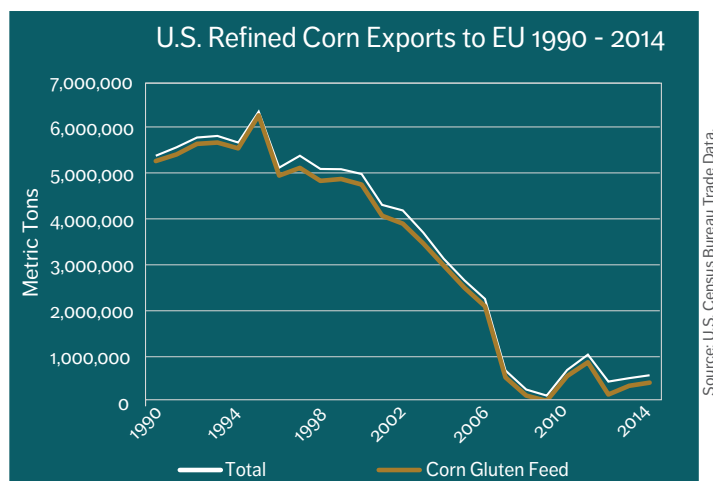
For U.S. corn refiners, trade expansion opportunities with Japan under TPP are the most promising given the size of Japan's economy, as well as the current import limits and high tariffs on refined corn products. Exports to Japan currently account for about 3 percent of total refined corn exports. The industry's current top three exports to Japan are modified starches, pure fructose and CGM. These three – in addition to native corn starch – have the greatest growth potential if barriers are reduced.

### TRANSATLANTIC TRADE AND INVESTMENT PARTNERSHIP

The European Union is the world's largest importer of agricultural products and was the number one export market for refined corn products, namely corn gluten feed. The European market for CGF has dropped from a peak of 6.3 million metric tons in 1995 to near-zero levels because of import restrictions on biotech corn varieties and the slow pace of EU's approval process.

The EU maintains a series of tariff, non-tariff and regulatory barriers that severely limit the ability of the U.S. corn refining industry to serve this market. In particular, tariffs on corn sweeteners and CGM are very high.

Significant gains would be realized if these barriers, as well as issues surrounding biotechnology, were eliminated as a result of TTIP negotiations.



### Exports of Products from Corn – 2014

PRODUCT	VOLUME (Metric Tons)	VALUE
Corn starch	91,369.5	\$78,132,000
Corn oil, crude	222,455.4	\$210,671,000
Corn oil, once refined	11,460.3	\$13,695,000
Corn oil, fully refined	158,236.8	\$176,626,000
Glucose (dextrose)	98,409.5	\$74,493,000
Glucose syrup not containing fructose or containing in the dry state less than 20% fructose	445,381.1	\$205,378,000
Glucose syrup with 20–50% fructose	74,311.7	\$26,847,000
Chemically pure fructose	95,948.9	\$85,530,000
Fructose syrup with 50%+ fructose	1,293,105.0	\$441,624,000
Fructose solids containing more than 50% fructose	16,692.8	\$33,934,000
Corn gluten feed	988,199.0	\$223,531,000
Corn gluten meal	946,475.0	\$680,970,000
Other residues of starch manufacturing	67,654.0	\$18,229,000
Dextrins	26,067.1	\$25,982,000
Modified starches derived from corn starch	293,157.9	\$253,708,000

Source: U.S. Census Bureau Trade Data.

## POTENTIAL MARKETS

The U.S. and Cuba are starting the process to re-open relations. Cuba is an untapped market for U.S. corn refiners, yet there is significant potential for feed, sweetener and starch products to fill future needs of the Cuban animal feed, pharmaceutical and food and beverage industries.

Given its proximity to the United States – just 90 miles off U.S. coastline – Cuba is a natural market for U.S. products. A growing Cuban middle class and increasing tourism will likely lead to higher consumption of protein, dairy products and processed foods. This presents an opportunity for corn refiners as we produce excellent feed products for poultry, swine and cattle. While there is currently little food manufacturing in Cuba, the outlook

for future foreign investment could lead to market potential for high-quality sweeteners and starches from corn.

While it may be some time before trade can be normalized and necessary infrastructure enhancements put in place to support imports of value-added commodities, there is reason to be optimistic about the future of U.S. refined corn exports to Cuba.

The promise of new trade agreements and expanding demand for quality ingredients bode well for the expansion of U.S. export markets. The corn refining industry's comparative advantage is based on its ability to provide a stable supply of high-quality products, to produce innovative products and applications time and again, and the ability to meet customer demand.

## 2014 Safety Program Award Winners

### Incident Rate Excellence Award

Archer Daniels Midland Company ■ Clinton, IA (BioProcessing); Southport, NC  
Cargill, Incorporated ■ Dayton, OH; Eddyville, IA  
Ingredion Incorporated ■ Indianapolis, IN; Winston-Salem, NC  
Tate & Lyle Americas ■ Dayton, OH; Loudon, TN (Bio Products)

### One Million Hour Award

Archer Daniels Midland Company ■ Decatur, IL (BioProducts)  
Cargill, Incorporated ■ Eddyville, IA; Blair, NE; Dayton, OH  
Ingredion Incorporated ■ Indianapolis, IN; Stockton, CA

### Zero Lost Workdays Award

Archer Daniels Midland Company ■ Clinton, IA (BioProcessing); Marshall, MN; Southport, NC  
Cargill, Incorporated ■ Dayton, OH; Eddyville, IA; Fort Dodge, IA; Hammond, IN; Indianapolis, IN; Wahpeton, ND  
Ingredion Incorporated ■ Indianapolis, IN; Stockton, CA; Winston-Salem, NC  
Tate & Lyle Americas ■ Dayton, OH; Loudon, TN (Bio Products)

### About The Safety Program

The CRA has always recognized the vital importance of safety in its plants, products, and manufacturing processes. An awards program was implemented in 2009 to further underscore the industry's commitment to safety. In 2013, the program expanded to include bioprocessing and specialty product refinement facilities.

# Corn Refiners Association Member Companies' Products

	Archer Daniels Midland Company	Cargill, Incorporated	Ingredion Incorporated	Tate & Lyle Americas
<b>STARCH PRODUCTS</b>				
Unmodified, food	■	■	■	■
Unmodified, industrial	■	■	■	■
Modified, food		■	■	■
Modified, industrial	■	■	■	■
Dextrins	■	■	■	■
<b>REFINERY PRODUCTS</b>				
Glucose syrups	■	■	■	■
Maltodextrins	■	■	■	■
Dextrose monohydrate	■	■	■	■
Dextrose anhydrous		■	■	
High Fructose Corn Syrup-42	■	■	■	■
High Fructose Corn Syrup-55	■	■	■	■
Crystalline fructose	■			■
<b>CO-PRODUCTS</b>				
Crude oil	■	■	■	
Refined oil	■	■	■	
Corn gluten feed	■	■	■	■
Corn gluten meal	■	■	■	■
Corn germ or corn germ meal	■	■	■	■
Steepwater (CFCE)	■	■	■	■
Carbon dioxide	■			■
Corn fiber food/industrial ingredients	■	■	■	
<b>FERMENTATION AND OTHER CHEMICALS</b>				
Citric acid	■	■		■
Lactic acid	■	■		
Lysine	■			
Threonine	■			
Xanthan gum	■	■	■	
Erythritol		■	■	
Sorbitol	■	■	■	
Xylitol		■	■	
Mannitol	■	■	■	
Maltitol	■	■	■	
Hydrogenated starch hydrolysates			■	
Glucose hydrolysates			■	
<b>OTHER</b>				
Ethanol, fuel/industrial	■	■	■	■
Ethanol, beverage	■			

Product lists are accurate as of publication date, but may change with time.  
Also available online at <http://www.corn.org/cra-members/member-products/>.

# Corn Refiners Association Member Companies'

## Domestic and International Plant Locations

Archer Daniels  
Midland Company  
P.O. Box 1470  
Decatur, Illinois 62525

### **Domestic Plants:**

Decatur, Illinois 62525  
Peoria, Illinois 61602\*  
Cedar Rapids, Iowa 52404  
Clinton, Iowa 52732  
Marshall, Minnesota 56258  
Columbus, Nebraska 68601  
Southport, North Carolina 28461\*

### **International Plants:**

Razgrad, Bulgaria  
Tianjin, China  
Szabadegyháza, Fejér, Hungary  
Guadalajara, Jalisco, Mexico  
Adana, Turkey

Cargill, Incorporated  
P.O. Box 5662/MS62  
Minneapolis, Minnesota  
55440

### **Domestic Plants:**

Hammond, Indiana 46320  
Indianapolis, Indiana 46222\*  
Paris, Illinois 61944\*  
Cedar Rapids, Iowa 52406  
Eddyville, Iowa 52553  
Fort Dodge, Iowa 50501  
Blair, Nebraska 68008  
Wahpeton, North Dakota 58075  
Dayton, Ohio 45413

### **International Plants:**

Castro, Parana, Brazil  
Uberlandia, Minas Gerais, Brazil  
Song Yuan, China  
Haubourdin, Pas-de-Calais, France  
Krefeld, Nordrhein-Westfalen, Germany  
Castelmassa, Veneto, Italy  
Martorell, Barcelona, Spain  
Orhangasi, Bursa, Turkey

Ingredion Incorporated  
5 Westbrook Corporate Center  
Westchester, Illinois 60154

### **Domestic Plants:**

Stockton, California 95206  
Bedford Park, Illinois 60501  
Indianapolis, Indiana 46221  
Cedar Rapids, Iowa 52404  
North Kansas City, Missouri 64116  
Winston-Salem, North Carolina 27107

### **International Plants:**

Baradero, Buenos Aires, Argentina  
Chacabuco, Buenos Aires, Argentina  
Lane Cove, Sydney, Australia  
Balsa Nova, Parana, Brazil  
Cabo, Pernambuco, Brazil  
Mogi-Guacu, Sao Paulo, Brazil  
Trombudo, Brazil  
Cardinal, Ontario, Canada  
London, Ontario, Canada  
Cali, Valle del Cauca, Colombia  
Hamburg, Germany  
Guadalajara, Jalisco, Mexico  
San Juan del Rio, Queretaro, Mexico  
Tlalnepantla, Mexico State, Mexico  
Faisalabad, Punjab, Pakistan  
Cornwala, Punjab, Pakistan  
Mehran, Pakistan  
Lima, Peru  
Bupyeong, Kyunggi-do, South Korea  
Incheon, Bupyeong-ku, South Korea  
Sikhiu, Nakhornratchasima, Thailand

Tate & Lyle Americas  
*(A subsidiary of Tate & Lyle, PLC)*  
P.O. Box 151  
Decatur, Illinois 62525

### **Domestic Plants:**

Decatur, Illinois 62521  
Lafayette, Indiana 47902  
Lafayette, Indiana 47905  
Dayton, OH 45414\*  
Loudon, Tennessee 37774

### **International Plants:**

Guadalajara, Jalisco, Mexico  
Casablanca, Morocco  
Koog aan de Zaan, The Netherlands  
Boleraz, Trnava, Slovakia

\*Specialty product refinement facilities. Plants do not grind corn.

International plants listed include joint ventures where the company has a 50 percent or greater interest and grind corn only.



# Board of Directors

Richard N. Kyle, Chairman  
Ingredion Incorporated

Julian Chase, Vice Chairman  
Cargill, Incorporated

Christopher M. Cuddy  
Archer Daniels Midland Company

Kris R. Lutt  
Archer Daniels Midland Company

Michael J. Wagner  
Cargill, Incorporated

Rob Ritchie  
Ingredion Incorporated

Jim Stutelberg  
Tate & Lyle Americas

Peter M. Castelli  
Tate & Lyle Americas

## Staff

John Bode  
President & CEO

Dan Chartier  
Vice President, Government Affairs

Julia Gustafson  
Counsel & Director, Legislative Affairs

Andy Resnick  
Director, Public Affairs

Shannon Marshall  
Director, Meetings & Conferences

Cassandra Kuball  
Director, Trade & Industry Affairs

Kailee Tkacz  
Director, Food & Nutrition Policy

Diane Douglass  
Director, Operations

Emily Talbot  
Manager, Digital Media & Communications

Ben Gruitt  
Manager, Sustainability & Special Projects

Carla Crider  
Special Assistant to the President & CEO

# Honorary Directors\*

Martin Andreas  
Archer Daniels Midland Company

Fred M. Ash  
Cerestar USA, Inc.

Patrick E. Bowe  
Cargill, Incorporated

C. G. Caldwell  
National Starch and Chemical Company

Paul E. Grunder  
CPC International, Inc.

E. S. Micek  
Cargill Trustees

J. Patrick Mohan  
Tate & Lyle Americas

William H. Powell  
National Starch and Chemical Company

Robert M. Powers  
A. E. Staley Manufacturing Company

H. T. Reed  
Penford Products Co.

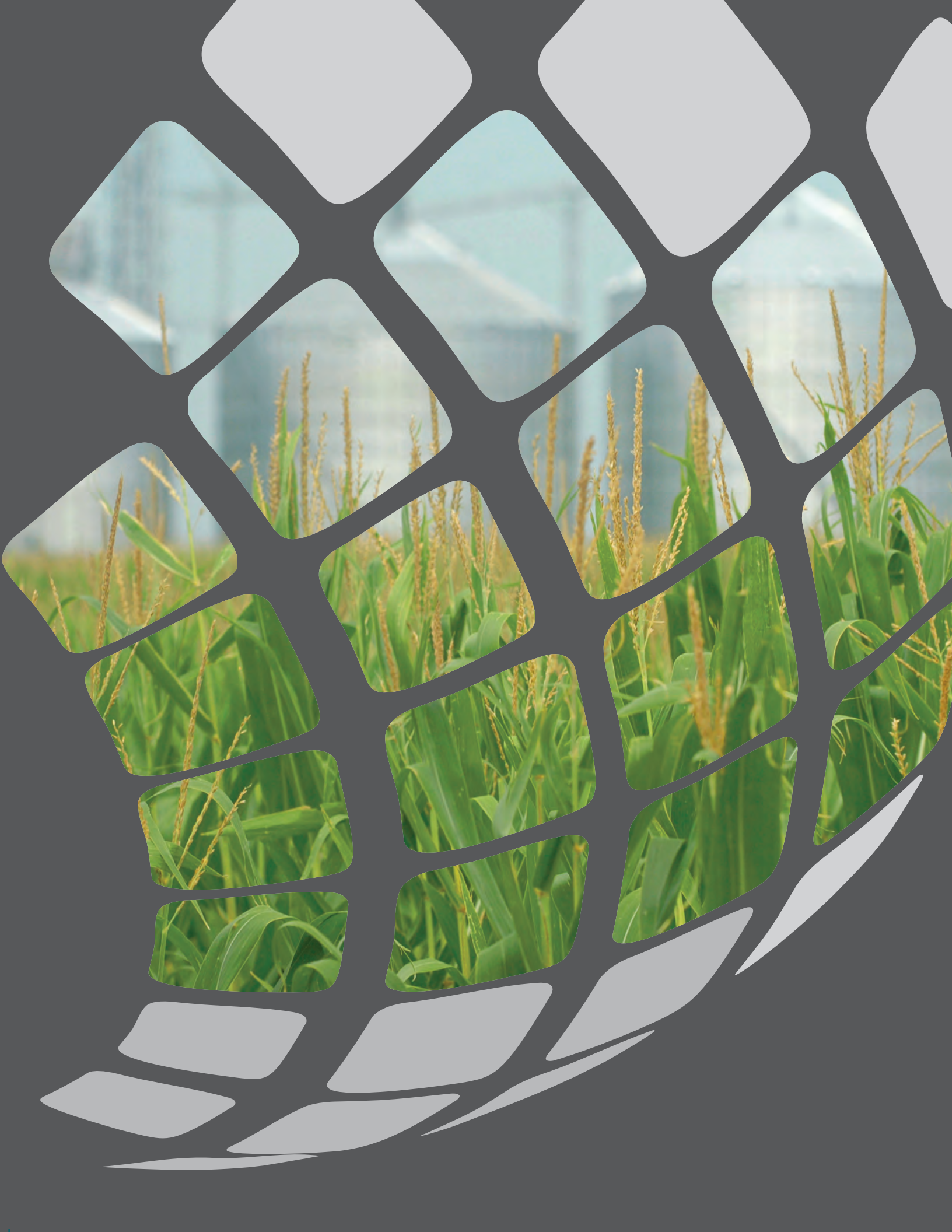
John Rice  
Archer Daniels Midland Company

Dennis C. Riddle  
Archer Daniels Midland Company

Samuel C. Scott  
Corn Products International, Inc.

Richard Vandervoort  
Corn Products International, Inc.

\*Listed with their current (or prior) member company affiliation.





1701 Pennsylvania Ave., N.W., Suite 950 | Washington, DC 20006-5806  
Phone: 202.331.1634 | Fax: 202.331.2054 | [www.corn.org](http://www.corn.org)