



DDGS OVERVIEW

Prepared for : Iowa Renewable Fuels Summit
January 24, 2012



PRESENTATION OUTLINE

- Gavilon Overview
- Industry Overview
- DDGS Supply and Demand
- Domestic Market
- Export Market
- Process and Nutrient Comparison
- Opportunities/Outlook

SERVING PRODUCERS & CONSUMERS

PROVIDING A CRITICAL LINK IN THE SUPPLY CHAIN

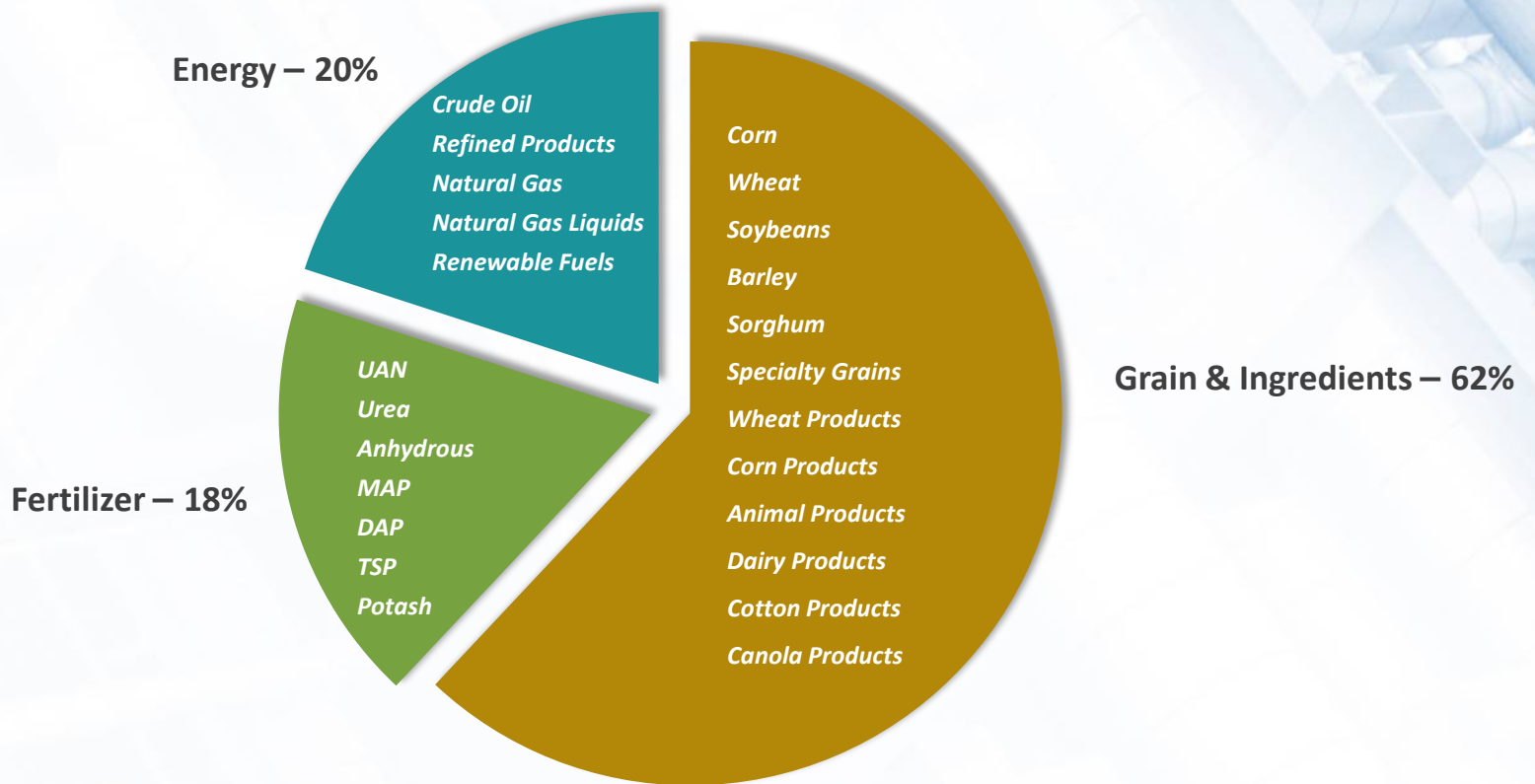
- We serve customers on both ends of the supply chain – producers and consumers of feed, food and fuel
- We do not compete with our customers
 - We build trusting, mutually beneficial relationships with our suppliers
 - We provide quality information and service at a competitive price for our customers
- We provide origination, storage and handling, transportation and logistics, marketing and distribution and risk management services



COMMODITY MIX

DIVERSIFYING MARGIN CONTRIBUTIONS

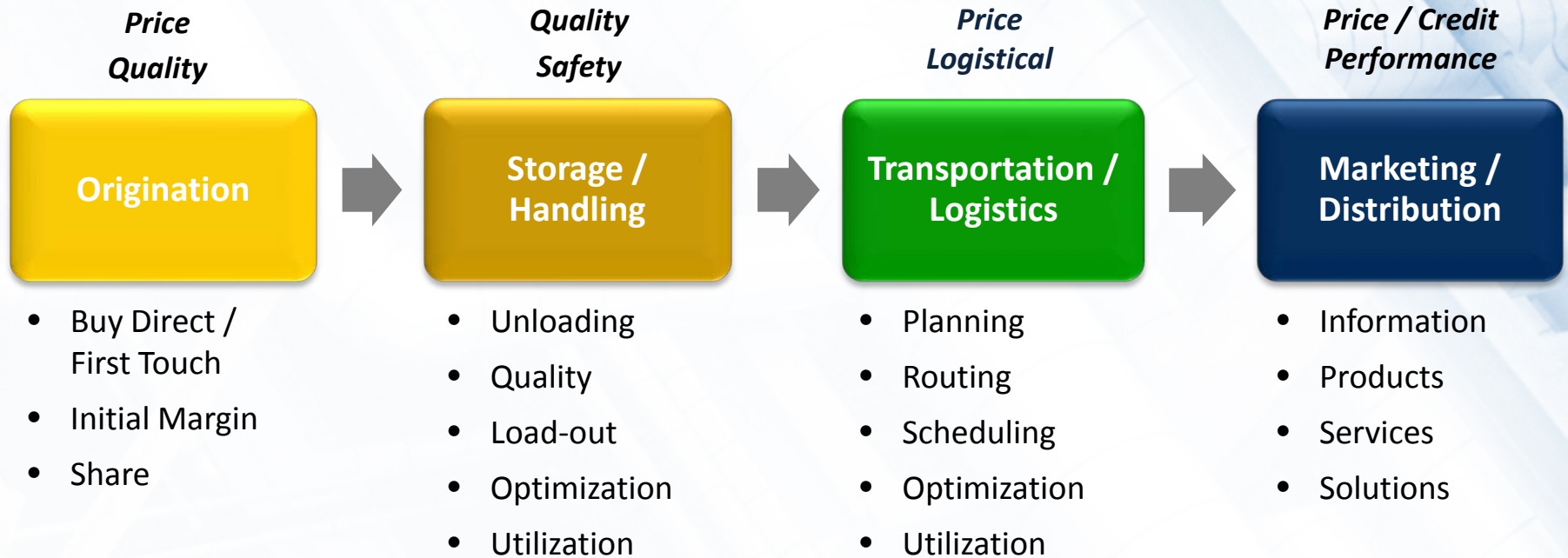
COMMODITY MIX
Based on 2-year average EBITDA



Providing origination, storage and handling, transportation and logistics, marketing and distribution and risk management services across all segments

CORE CAPABILITY – CREATING VALUE

Risk Management



GLOBAL NETWORK

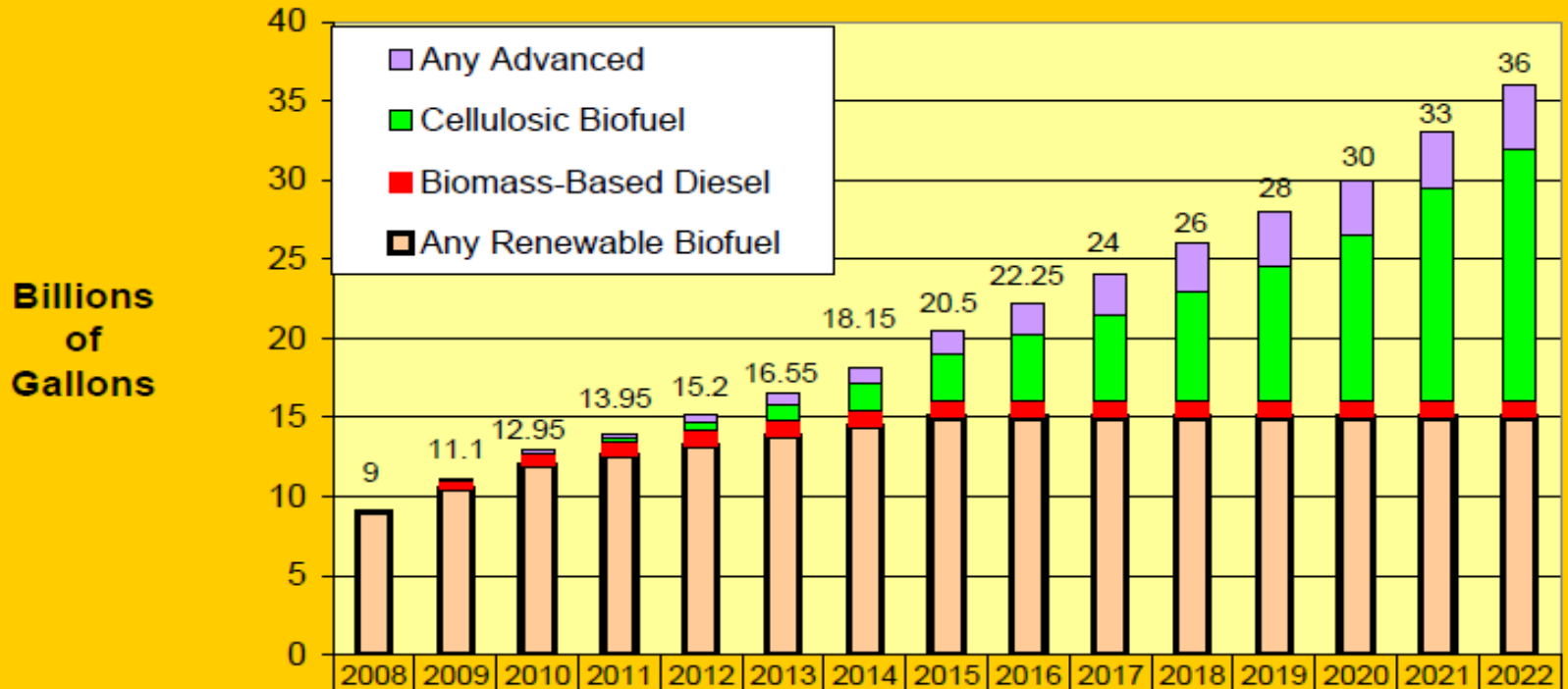
LEVERAGING SCALE AND SCOPE

- We optimize timing, delivery, quality and quantity of commodities from producers to consumers across our global network



ETHANOL PRODUCTION IN USA

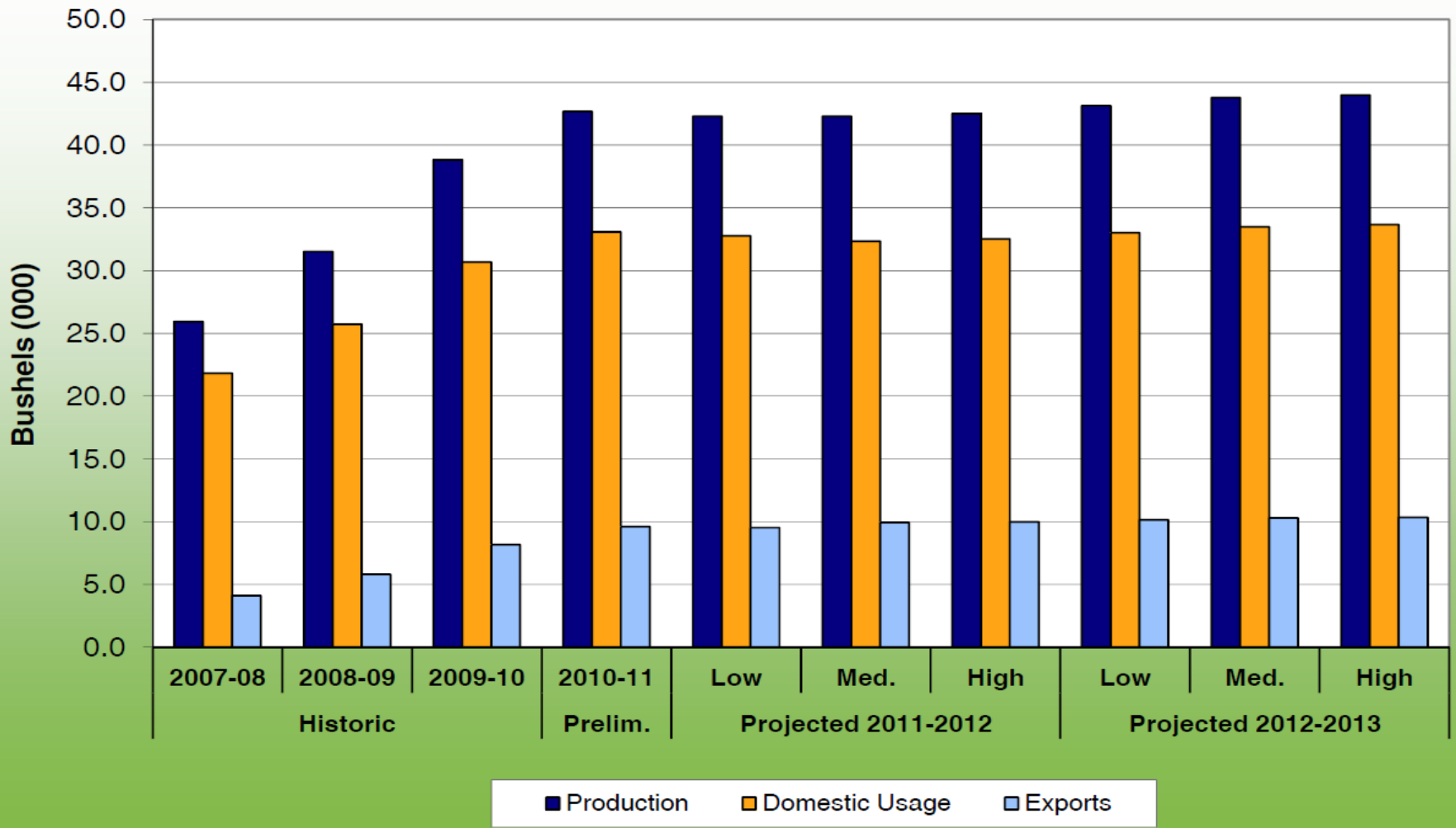
RFS2: Four Annual Standards



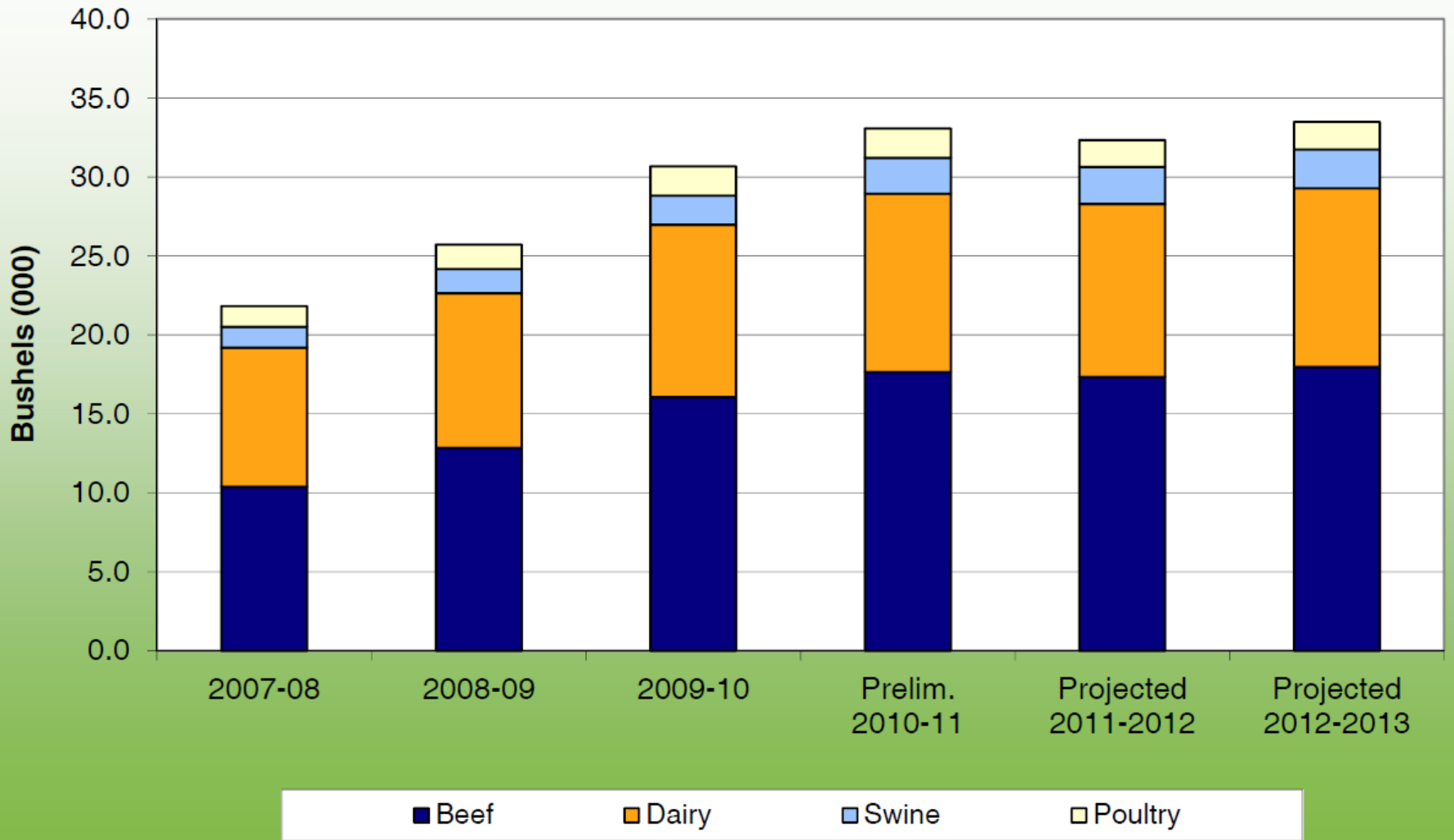
Any Advanced		0.1	0.2	0.3	0.5	0.75	1	1.5	2	2.5	3	3.5	3.5	3.5	4
Cellulosic Biofuel			0.1	0.25	0.5	1	1.75	3	4.25	5.5	7	8.5	10.5	13.5	16
Biomass-Based Diesel		0.5	0.65	0.8	1	1*	1	1	1	1	1	1	1	1	1
Any Renewable Biofuel	9	10.5	12	12.6	13.2	13.8	14.4	15	15	15	15	15	15	15	15

* biomass diesel in 2013 and thereafter will be at least 1 BG. **Corn ethanol is deemed conventional biofuel and deemed renewable only.

Dried Distillers Grains Production and Usage



DDGS Usage (beef, dairy, swine, and poultry), Corn Equivalent

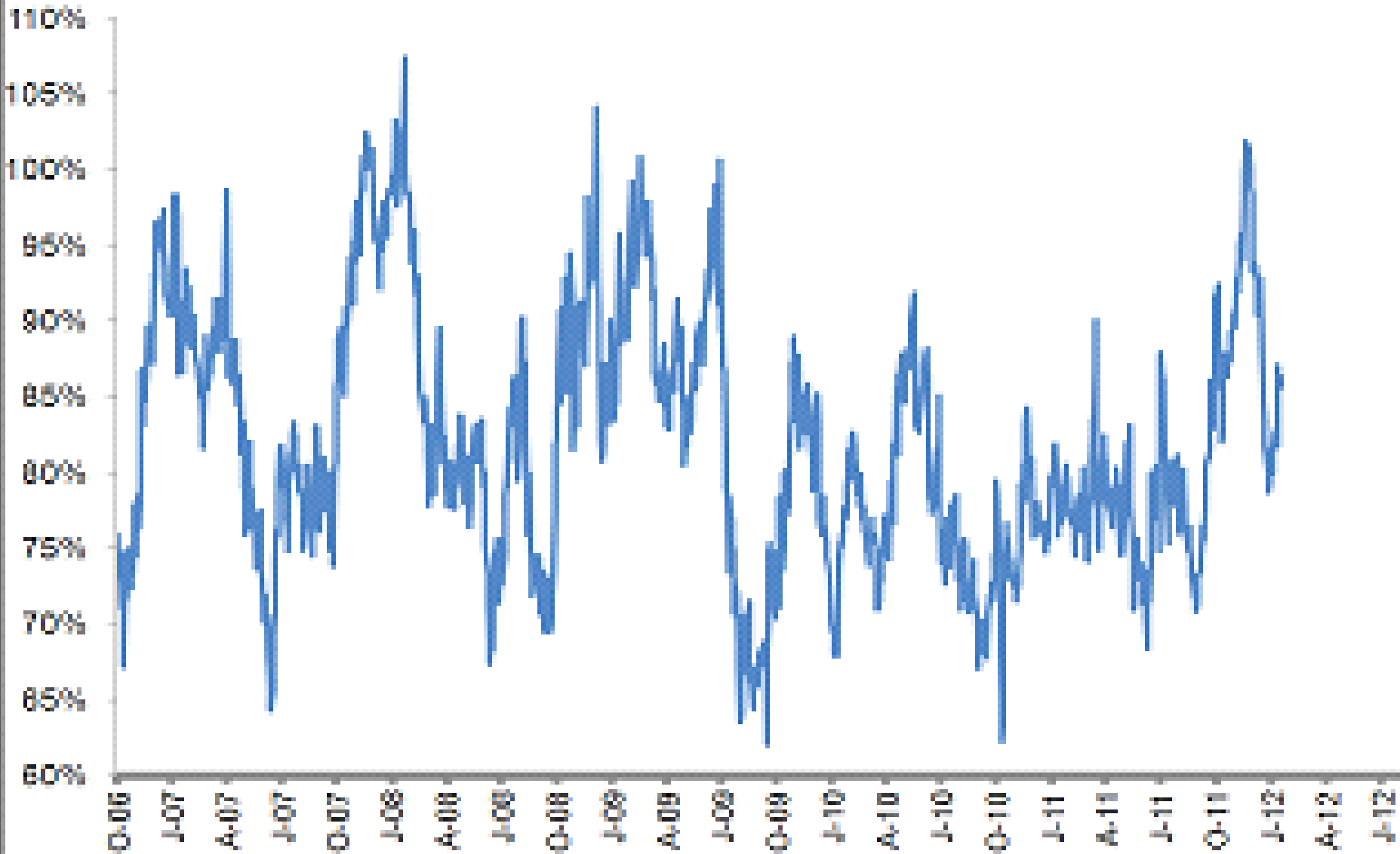


DOMESTIC USAGE

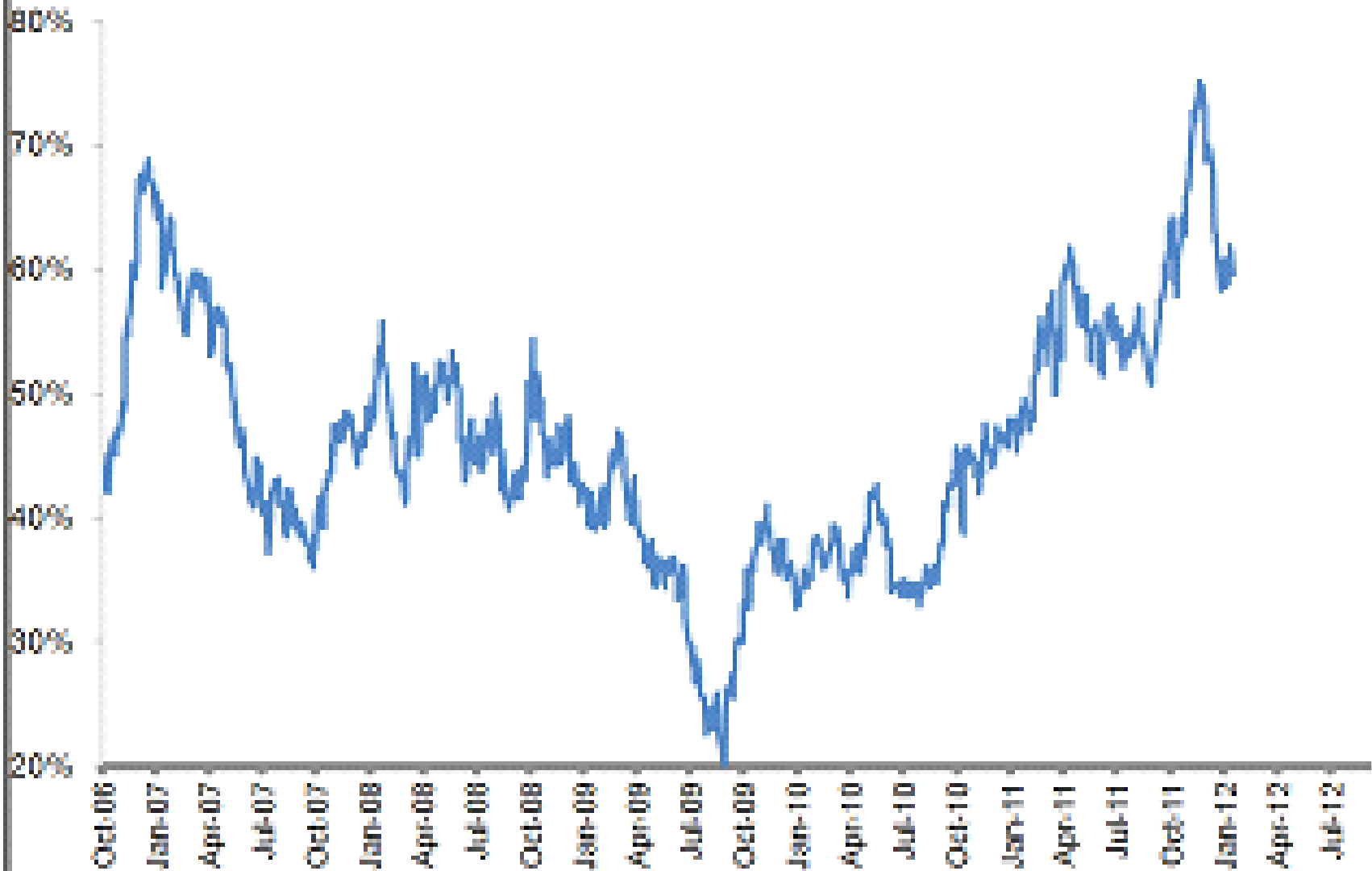
One third of the corn used to make ethanol becomes distillers grains, most of which is fed to animals used to provide food.

- 41% steak, hamburger, roast (beef cattle)
- 39% milk, yogurt, cheese (dairy cattle)
- 10% ham, pork loin, bacon (swine)
- 9% eggs, chicken breast (poultry)

Avg. IA DDG value as % of Corn



Avg. IA DDG value as % of Soybean Meal



WHY EXPORT / IMPORT DDGS ??

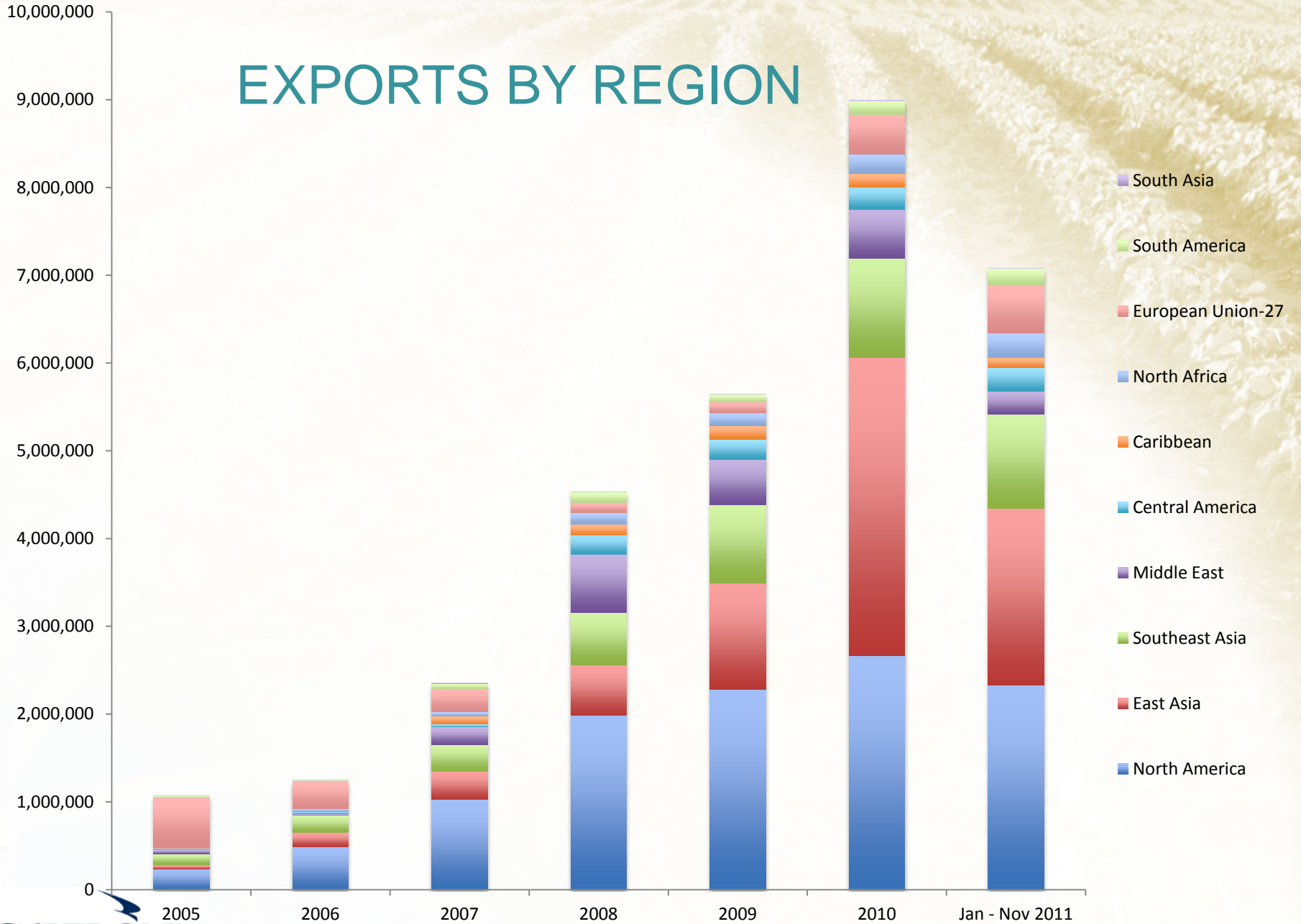
❖ Advantages to Ethanol Producers :

- Demand growth potential as supply blossomed
- Logistical advantages for some producers
- Gain reliable customers

❖ Advantages for Importing consumers :

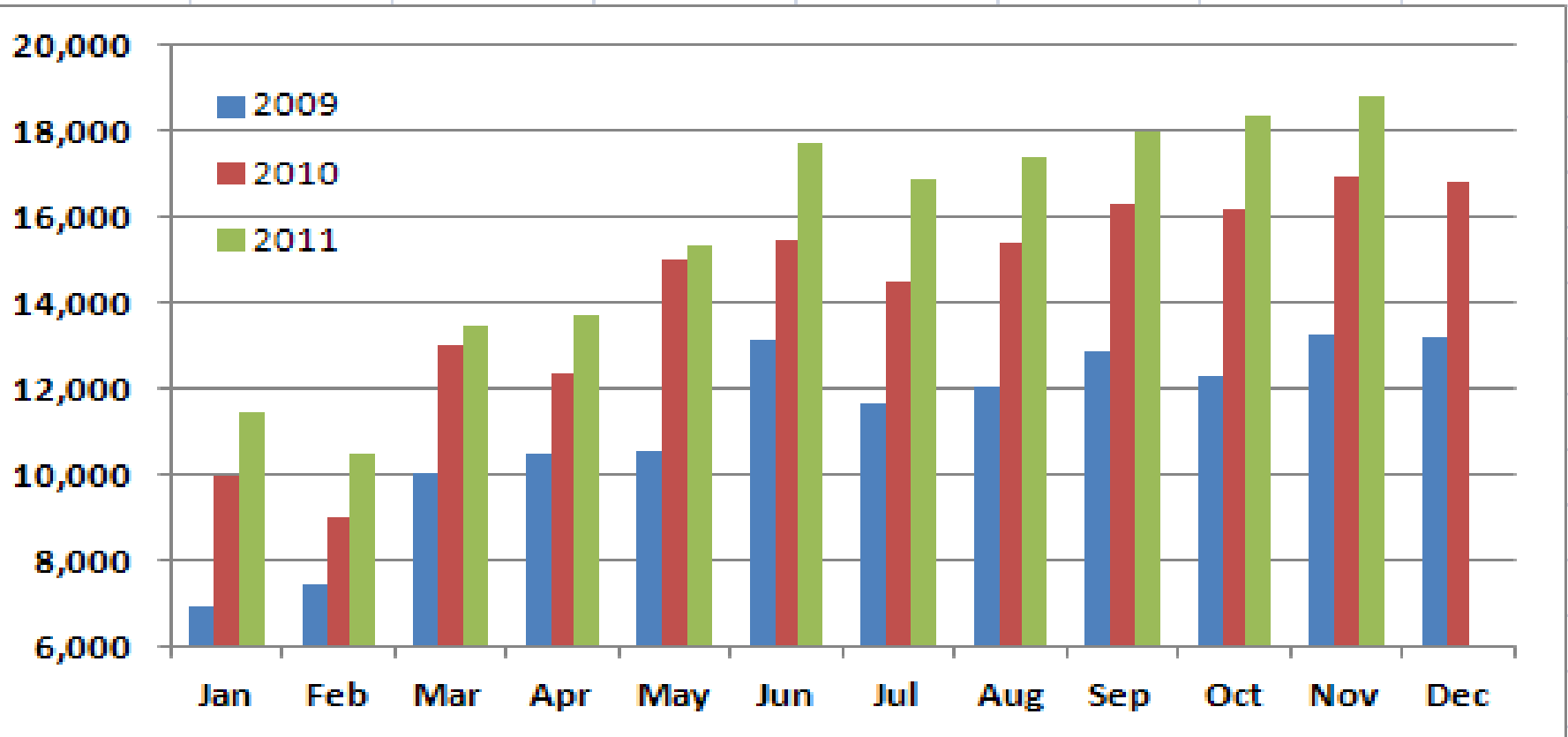
- Access to a quality feed ingredient
- Value priced products
- Variety of shipping options

EXPORTS BY REGION



CHINA FEED GROWTH

China Compound Feed Monthly Production (source CNBS, Gavilon)



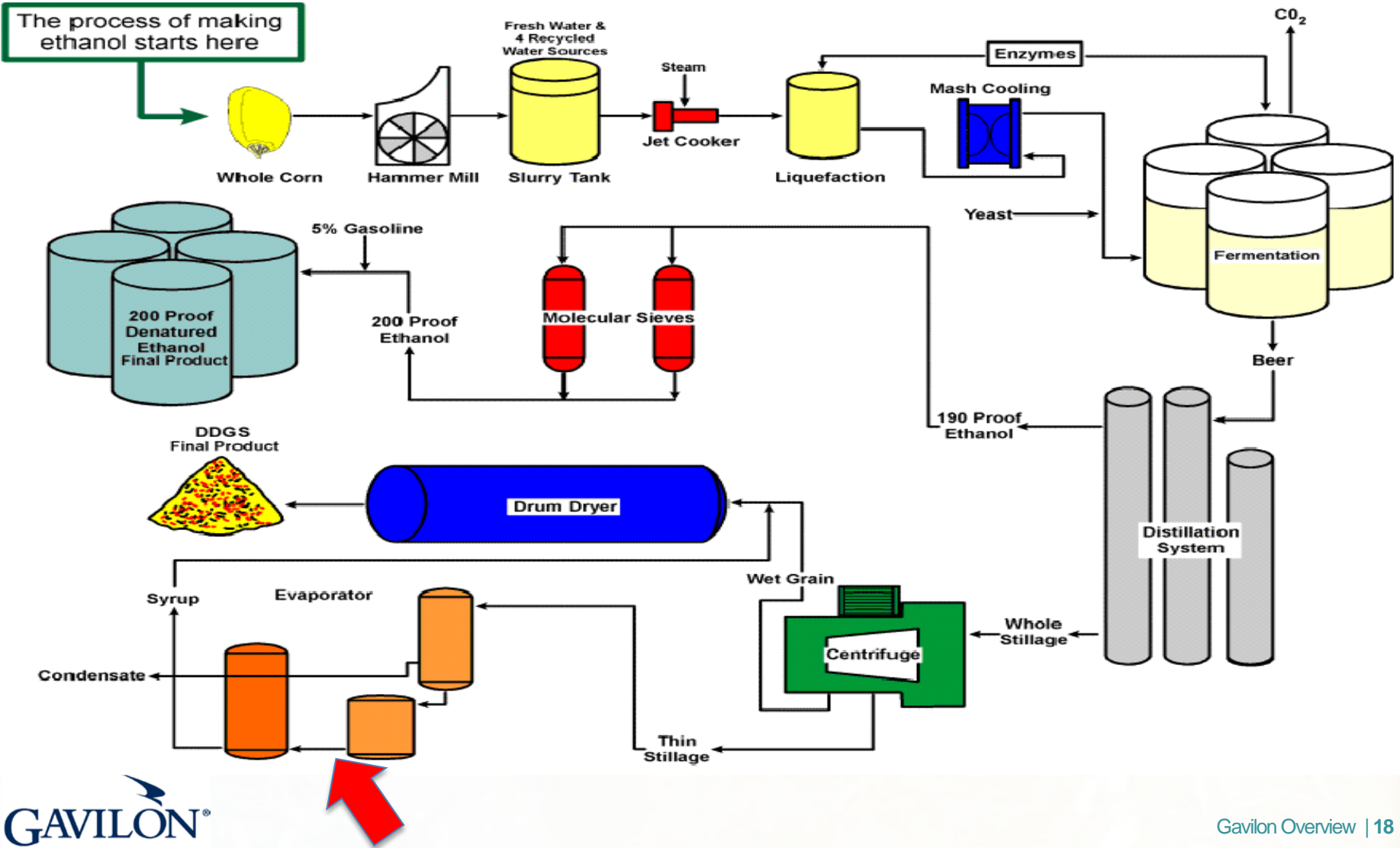
EXPORTS – JAN – NOV 2011

Country	% change	Exports in Metric Tons
1 Mexico	8	1,640,160
2 China	(46)	1,281,136
3 Canada	(28)	686,437
4 Vietnam	14	446,005
5 Japan	44	274,773
6 South Korea	(41)	262,688
7 Indonesia	(3)	229,400
Total	(15)	7,080,508

GAVILON EXPORTING



DRY MILL ETHANOL PROCESS



PRODUCTS FROM DRY MILLS

DDGS – Distillers Dried Grains with Solubles is the product obtained after the removal of ethyl alcohol by distillation from yeast fermentation of a grain or a grain mixture by condensing and drying at least $\frac{3}{4}$ of the solids of the resultant whole stillage by methods employed in the grain distilling industry

DWGS – Distillers Wet Grains with Solubles (about 38 % of all production sold this way, typically 65 % moisture)

CCDS -- Condensed Corn Distillers Solubles.

High Protein DDGS -- limited supply, 34 – 50 % product, dependent upon plant technology

Corn oil -- feed grade, captured from the liquid stream, post fermentation. About 46% of plants produce this. Works nicely into the biodiesel market making these plants “dual fuel”.

Low Oil DDGS — traditional DDGS with some of the corn oil removed, typically via centrifuges

BACKGROUND INFORMATION

Corn oil removal trend started in 2005 with about 8 plants.

Lawsuit in 2009 delayed widespread implementation.

There is about 2 lbs of corn oil in a 56 pound bushel.

Centrifuge systems will remove .2 to .6 lbs per bushel

Starting with 10.5 fat, reduction to 7.5 is expected

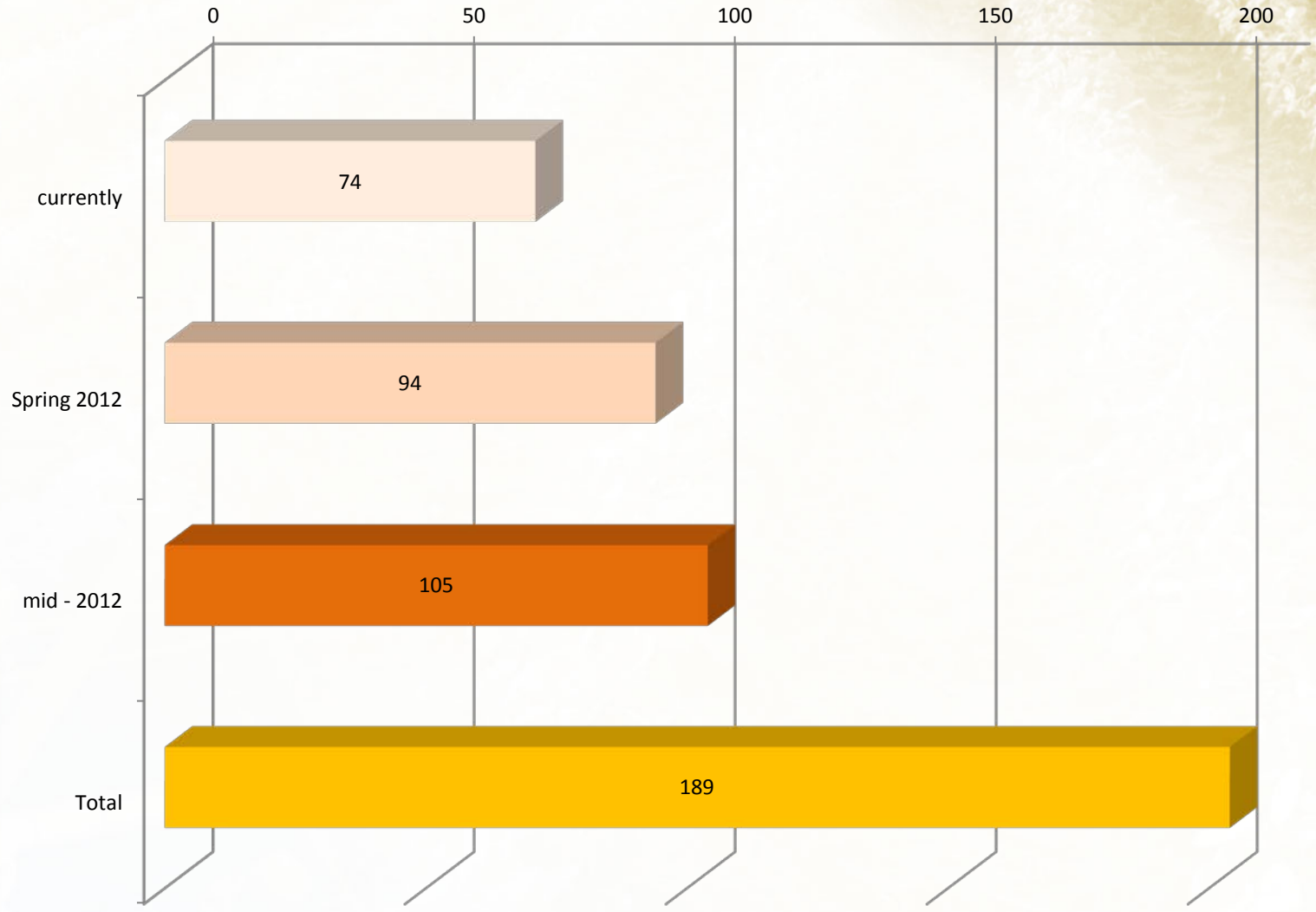
There is a move to use emulsifiers to improve yields, towards 0.8 – 1.0

One major company has a stated goal of 4 % fat in the DDGS

Of the 204 plants producing ethanol, some are wet corn mills producing corn gluten feed and corn gluten meal, along with fructose.

I am using a 14.0 billion gallon ethanol market less 1.2 billion gallons from wet corn mills, thus a dry mill market size of 12.8 billion gallons or 38.8 million short tons of DDGS (34.97 m mt)

NO. OF ETHANOL PRODUCERS EXTRACTING INEDIBLE CORN OIL



WHY REMOVE THE OIL

Currently DDGS is being sold ex-plant at \$ 200 a short ton = 0.10 per pound.

Currently feed grade corn oil is being sold ex-plant at \$ 700 a short ton = 0.35 per pound. It varies with the price of corn and competing fats and oils.

A typical 100 mg plant can produce 275,000 – 325,000 lbs a week, thus \$105,000 revenue per week. In one year the income = \$5.46 million. Capital expense's vary between \$3.5 million to \$5.0 million.

There has **NOT** been a noticeable difference in revenue at most plants.

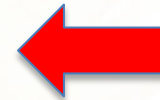
Commodity rail market does not trade on Pro-Fat

Local market (around each plant) know what they are getting – low variability

Monogastric consumers are analyzing and buying accordingly

Beef cattle protest the most when change first made

Decline in fat does not correlate to production volume



I expect that 7.5 % will become the new norm, versus 10 – 11 %



QUESTIONS?

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