# **ABENGOA**

# Innovative technology solutions for sustainability



# **Defending Ethanol in Kansas**

Mar 18<sup>th</sup>, 2015

# **ABENGOA**

Kansas is an important player on the ethanol arena: 3.5% of national ethanol capacity

Million Gallor	ns/ Year)						
	Nameplate	Operating	Under Construction/ Expansion	Total	Installed Ethanol Biorefineries	Operating Ethanol Biorefineries	Biorefineries Under Constr./ Expansion
owa	3,990	3,985	30	4,020	43	42	1
Nebraska	2,044	1,991	-	2,044	26	23	-
llinois	1,472	1,434	-	1,472	15	14	-
ndiana	1,148	1,046	-	1,148	14	13	-
Minnesota	1,147	1,129	-	1,147	22	21	-
outh Dakota	1,024	1,024	-	1,024	15	15	-
Cansas	529	504	-	529	13	12	-
Ohio	528	528	-	528	7	7	-
Wisconsin	516	516	5	521	9	9	1
North Dakota	382	382	65	447	4	4	1
Texas	355	355	-	355	4	4	-
Missouri	271	256	-	271	6	6	-
Michigan	270	270		270	5	5	-
Tennessee	225	225	-	225	2	2	-
California	223	178	-	223	6	4	-
New York	164	164	-	164	2	2	-
Oregon	149	41	-	149	3	2	-
Colorado	125	125	-	125	4	4	-
Pennsylvania	110	110	-	110	1	1	-
Georgia	101	101	-	101	2	2	-
/irginia	65	65	-	65	1	1	-
Arizona	50	50	-	50	1	1	
Mississippi	54	-	-	54	1	-	-
daho	50	50	-	50	1	1	-
Kentucky	36	36	-	36	2	2	-
New Mexico	30	-	-	30	1	-	-
Wyoming	10	10	-	10	1	1	-
Florida	8	-	-	8	1	-	-
.ouisiana	1	-	-	1	1	-	-
TOTAL U.S.	15,077	14,575	100	15,177	213	198	3

## **ABENGOA**

#### Ethanol offers massive economic benefits to the state of Kansas

# RENEWABLE FUEL Drives Economic Growth in Kansas

The Renewable Fuel Standard (RFS) creates competition in our nation's transportation fuel sector, ensuring market access for cheaper, clean, low carbon alternatives to oil, creating choice for consumers at the pump. The biofuel sector has invested billions of dollars since 2007 to bring these fuels to market, driving economic activity throughout the United States. **Kansas** is no exception.



\$4.1B Economic Output



16,620 Jobs



\$1.0B Wages



\$323.6M Taxes

The renewable fuel sector, including conventional and cellulosic ethanol, biodiesel, and advanced biofuels and their suppliers generates \$4.1B of total economic output annually in Kansas. The sector supports 16,620 jobs and generates \$1.0B in wages annually, contributing \$200.4M in Federal taxes and \$123.3M in Kansas taxes each year.

The economic activity started by the renewable fuel sector creates a ripple effect as supplier firms and employees respend throughout the economy, creating output and jobs in industries and locations that can be far removed from the starting point.

Economic Impacts of Renewable Fuel Sector in Kansas	Jobs	Wages	Economic Impact	
Direct	5,441	\$468,969,500	\$2,212,379,000	
Induced	3,912	\$169,708,800	\$560,288,600	
Supplier	7,267	\$385,494,500	\$1,348,070,900	

## ABENGOA BIOENERGY

#### Cellulosic ethanol plant opened doors in Hugoton, KS in October 2014

- Provides a market for 85,000 acres of grain crop residue, providing local farmers with more than \$17 million annually in extra income
- The plant will receive and process more than 300,000 dry tons of locally sourced biomass per year
- On-site cogeneration will produce 21 MW of electricity per year enough to power the plant and sell some back to the local Stevens County community.
- Construction phase provided an average of 300 full time jobs. The plant itself will provide 76 full-time jobs, with an annual payroll in excess of \$5 million
- Built in part with a \$97 million grant from the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) and a \$132.4 million conditional loan guarantee from the U.S. Department of Energy's Loan Programs Office



## ABENGOA BIOENERGY

#### Proposed tax will have negative effect on ethanol business in the state

#### **Effect on state**

- Already low ethanol profit margins will be squeezed even further...
- ... increasing risk of plant shutdowns and lost economic benefit to state
- Taxing a sector that is meant to provide renewable energy and to support local economy would be detrimental

### **Effect on our business**

- **❖** Due to weak economics, our corn ethanol plant in Colwich has been shutdown since Jan 2015...
- **❖** Margins have been historically low (below 5%)....
- ...with additional taxation, the plant will struggle to re-open so:
  - Kansas will lose tax revenues from plant operation
  - Kansas will lose additional economic benefit
- Taxation will also affect the cellulosic ethanol plant in Hugoton, KS by:
  - Not allowing it to become competitive with corn ethanol
  - Forsake tax revenue from operations
  - Lose additional economic benefit to the state in terms of jobs and income

## **ABENGOA BIOENERGY**

### **Colwich financials and economic benefit to Kansas state:**

**Gross Margin Review** 

Gross Margin Review					
, and the second	2011	2014 * Projected 2015 In millions USD		Total	%
Total Revenue (less Freight Revenue)	73.68	53.08	47.34	174.10	100.0%
Grain cost	56.58	37.85	27.20	121.63	69.9%
Other Direct Material Costs	10.74	12.16	12.72	35.61	20.5%
Direct Labor Costs	2.79	3.11	2.80	8.70	5.0%
Total Direct Costs without Direct Overhead					95.3%
Gross Margin					4.7%
Direct Overhead (Maintenance, Safety, etc)	2.80	2.62	1.86	7.28	4.2%
Number of Average Employees	48	42	45	45	

<sup>\* 2014</sup> comes from Q4 annualized