Iowa Renewable Fuels Association

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IOWA'S ETHANOL INDUSTRY

Capacity: Iowa's ethanol industry presently has the capacity to produce 864 million gallons of ethanol annually. Four wet mills account for 445 million gallons of capacity. Ten farmer-owned or cooperative dry mills, constructed since 1996, can provide 419 million gallons each year. Seven new farmer-owned or cooperative dry mills are under construction and scheduled to begin operation during the next year, and two additional plants are planned. These nine additional plants will be capable of producing 471.5 million gallons of ethanol each year. ***Iowa's total production capacity will soon reach more than 1.335 billion gallons per year – split between four wet mills and 19 dry mills.***

E10: Ethanol-blended fuel sales accounted for over 62% of the market in Iowa in 2003, and nearly one billion gallons of ethanol-blended fuel were sold. All auto manufactures approve the use of 10% ethanol-blended fuel. As E10 use becomes widely established in Iowa, the next market for ethanol development is E85 (85% ethanol, 15% gasoline).

E85: A $0.52/gal. credit on the federal income tax is now available to fuel retailers who sell E85-blended gasoline. There is a 5% to 15% loss in fuel economy using E85 instead of regular gasoline. The tax credit and difference between ethanol and gasoline wholesale prices offset E85's reduced fuel economy, so that E85 offers gasoline users a cost reduction below regular gasoline.

This cost advantage can mean growing E85 sales in Iowa, if more retail outlets are made available. Many new model cars are flexible-fuel vehicles. In Iowa, 45,000 vehicles are capable of burning E85 or regular gasoline. That makes the potential demand for E85 in Iowa at 18 million gallons, assuming a 50% market share and use patterns typical for flexible-fuel vehicles. Furthermore, E85 sales could increase as new car sales grow, since most car manufacturers are building vehicles that can use either gasoline or E85.

ECONOMIC IMPACT IN IOWA

The ethanol industry is an important part of Iowa's economic base. Under current conditions, it will produce $2.613 billion in annual product sales. Revenues are split about equally, with wet mills receiving $831 million, operating dry mills receiving $841 million, and upcoming dry mill capacity accounting for $946 million. Large shares of the industry's residual profits are reinvested in Iowa when the enterprises are producer-owned or cooperatives.

Direct impacts on Iowa's economy occur when ethanol producers buy their inputs. **Almost all of the corn and labor plus 44% of other expenses are purchased from Iowa residents and businesses.** Each year, the industry spends:

- $910 million for corn.
- $82.4 million for labor.
- $161.6 million for ingredients.
- $203.7 million for energy.

The industry's continued expansion represents a considerable further investment in Iowa.

- $519 million to develop the 471.5 million gallons of new ethanol capacity.
- $280 million in interest on borrowed capital over the life of the new plants.
- Current and proposed dry mill ethanol plants will contribute nearly $2.66 million to the local tax base.
- Combined state tax revenues (dry and wet mills) will be over $16 million per year.

Jobs. Iowa's ethanol industry currently creates 3,704 direct and indirect jobs. The plants proposed and under construction have the potential to add 1,430 more jobs, for a total of **5,187 direct and indirect jobs created by Iowa's ethanol industry**.

Value-Added. Iowa's existing ethanol industry generates $2.49 billion in total sales back to local communities, and when all of the plants under construction and proposed are in operation, the industry will have a $3.9 billion impact. **Iowa's dry mill industry delivers about $2.40 in added value for each bushel of corn it processes.**

IMPACTS ON AGRICULTURE

Ethanol producers are users and providers of agricultural commodities:

- Currently, the ethanol industry buys 320 million bushels of corn from Iowa growers each year. When new plants come on line, purchases will rise to ***495 million bushels annually***.

Additional corn purchases can increase corn prices by:

- Increasing the state average corn price. For instance, the new dry mills will purchase an additional 179 million bushels of Iowa's corn, elevating the state average price by about ***4¢ per bushel, which means an additional $81 million of revenue to farmers annually***.
- Increasing corn prices near plant sites above prices outside the plant's market area, especially when conventional businesses purchase from farmers. ***The plant site effect is about 12¢ per bushel,*** accounting for current truck transport costs and market areas for existing plants. In an Iowa county that produces 21 million bushels of corn and has an ethanol plant, this would generate an additional $1.1 million in farm-gate revenues in the county, due to higher value corn.

Co-product supplies create an opportunity for Iowa's livestock industry:

- Currently, dry mill plants produce 1.39 million tons of distillers grains. When new plants come on line, output will rise to 2.96 million tons annually. Wet mills produce approximately 1.14 million tons of gluten feed, 0.21 million tons of gluten meal, and 0.13 million tons of corn oil.
- Presently, the main local markets for co-products are dairy and feedlot beef cattle. Local cattle consume approximately 0.184 million tons of gluten feed and 0.414 million tons of distillers grains. Gluten feed has a 30% share of this market and is geographically positioned to supply the dairy feed market. The dry mill industry is located to provide distillers grains to the dairy and beef feedlot markets.
- The remaining gluten feed supply of 0.96 million tons is conveniently situated for export from the U.S. The remaining distillers grains supply of 0.98 million tons is exported or used in new Iowa livestock markets.
- The new feed markets for distillers grains in Iowa are hogs, chickens, and turkeys, which could use approximately 2.3 million tons of distillers grains. The oncoming new supplies of 1.57 million tons and the surplus of existing dry mills indicate that additional potential supplies are 2.55 million tons.

DRY MILL PLANTS: **LOCATION**	**PLANT NAME**	**CAPACITY** (Mil. Gall.)	**STAGE OF PRODUCTION**
Lakota	Midwest Grain Processors	50	Production
Galva	Quad County Corn Processors	25	Production
Marcus	Little Sioux Corn Processors	52	Production
Sioux Center	Siouxland Energy & Livestock Coop	21	Production
Coon Rapids	Tall Corn Ethanol	48	Production
West Burlington	Big River Resources	48	Production
Mason City	Golden Grain Energy LLC	40	Production
Hanlontown	Iowa Ethanol	45	Production
Ashton	Otter Creek Ethanol	45	Production
Iowa Falls	Hawkeye Renewables LLC	45	Production
Steamboat Rock	Pine Lake Corn Processors LLC	20	Construction
Denison	Amaizing Energy	40	Construction
Emmetsburg	Voyageur Ethanol	50	Construction
Fort Dodge	VeraSun	110	Construction
Nevada	Lincolnway Energy	50	Construction
Blairstown	Xethanol	5.5	Construction
Goldfield	Central Iowa Renewable Energy	40	Construction
Gowrie	Frontier Ethanol LLC	56	Planning
Fairbank	Midwest Renewables	100	Planning

WET MILL PLANTS: **LOCATION**	**PLANT NAME**	**CAPACITY** (Mil. Gall.)	**STAGE OF PRODUCTION**
Cedar Rapids & Clinton	Archer Daniels Midland	400	Production
Eddyville	Cargill	35	Production
Muscatine	Grain Processing Corp.	10	Production
TOTAL WET AND DRY MILLS		**1.3355 BILLION GALLONS OF ETHANOL**	