

Ethanol

Jody E. Pollok

Corn Marketing Program of Michigan

&

Michigan Corn Growers Association

October 20, 2005



Michigan Corn Basics

- Michigan Corn Basics
 - 1.9 million acres planted per year
 - Average 134 bushels per acre
 - 255 million bushels harvested for sale
 - 45% of our corn shipped out of state
 - 35% of corn fed to livestock in-state



Ethanol Basics

- Ethanol Basics
 - 1 bushel of corn produces nearly 3 gallons of ethanol
 - Ethanol, CO₂, DDG
 - 1.35 to 1.67% energy gain



Ethanol Usage

- Ethanol Usage & Markets
 - E-85
 - E-10
 - E-diesel
 - Fuel cells
 - Aviation ethanol



State Ethanol Utilization

Michigan

- Michigan - 5 billion gallons of gas
- 10% blend = 500 million gallons of ethanol
- Would use 178 million bushels of corn



Ethanol Production

- Michigan Ethanol, Caro
 - Economics
 - 40 million gallon nameplate capacity
 - 15 million bushels of corn
 - 35-41 jobs
 - Narrowed/closed bases



Proposed Ethanol Production

- Great Lakes Ethanol, Blissfield
 - Working group formed Jan '03
 - Feasibility study complete
 - Stock offering near completion
 - Groundbreaking held August 25, 2005
- Economics
 - 57 million gallons
 - 15-17 million bushels of corn
 - 35-41 jobs



Proposed Ethanol Production

- US Bioenergy Superior Ethanol, Lake Odessa
 - Working group formed
 - Feasibility study complete
 - Groundbreaking – September 15 2005
- Economics
 - 40-50 million gallons
 - 15-17 million bushels of corn
 - 35-41 jobs



Proposed Ethanol Production

- Andersons Ethanol, Albion
 - Feasibility study complete
 - Groundbreaking – September 15 2005
- Economics
 - 40-50 million gallons
 - 15-17 million bushels of corn
 - 35-41 jobs



Proposed Ethanol Production

- Marysville Ethanol, LLC – Marysville
 - Private partnership of investors and Michigan energy companies
 - Plant to be located next to Marysville Hydrocarbon's industrial complex
 - Groundbreaking late '05/early '06
- Economics
 - 50 million gallons
 - 18 million bushels of corn
 - 45 jobs



Michigan Ethanol Usage

- Increased Michigan Usage
 - '99 29 million gallons
 - '00 70 million gallons
 - '01 80 million gallons
 - '02 120 million gallons
 - '03 150 million gallons



National Ethanol Usage

Nationally

- U.S.-139 billion gallons of gas in '03
- 10% blend = 14 billion gallons of ethanol
- Would use 5 billion bushels of corn



National Ethanol Production

- 91 plants currently operating
 - 4.0 billion gallons of ethanol
- 20 plants under construction
- 3 increasing capacity
- Added capacity of 1.1 billion gallon
- Producer owned plants
 - comprise over 40% of production



National Ethanol Production

- '84-500 million gallons
- '90-900 million gallons
- '94-1.35 billion gallons
- '00-1.63 billion gallons
- '02-2.1 billion gallons
- '03-2.8 billion gallons
- '04-3.4 billion gallons
- '05-4.34 billion gallons* (estimate)



What Can Consumers Do?

- Visit www.e85fuel.com
- Look for a FFV next time you purchase a new vehicle
- Ask for ethanol-blended gasoline everytime you fill up

Call the Michigan Corn office for more info
at:517-668-CORN

