

# The Minnesota Ethanol Program

## **A. Background:**

The 20-cent ethanol producer payment legislation initially provided the security required by lenders to invest in these small farmer owned ethanol facilities. In addition to opposition from the petroleum industry, bankers were concerned that these plants could not compete in the market with large agribusiness processors. At the time, most ethanol production occurred in large mills outside the state. Minnesota corn prices were among the lowest in the country, which was advantageous to local processing by farmers.

Although these ventures have been successful to date, margins have been squeezed by periods of record high corn prices and low ethanol prices. It is hoped that ten years of payments will allow plants to retire debt, increase efficiency and to develop new products so they can survive the competition and price fluctuations in agricultural and petroleum markets. Unique aspects of the ethanol industry made these incentive payments necessary, but our ethanol industry will contribute over \$350 million in net annual benefit to the state.

Since low farm commodity prices are common, these new corn plants may represent a new strategy for the long-range profitability of farmers and farm communities. Vertical integration from the bottom up could allow farmers to participate in the more profitable end of agriculture. Promoting farmer investments in the processing and marketing of other crop or livestock enterprises may not require the high level of state funding as did ethanol. It is hoped that such initiatives can reduce the need for continual funding of farm financial crisis measures allowing farmers to make it on their own.

## **B. The main components of the Minnesota Ethanol Program are:**

1. Oxygenated fuel statute that requires state-wide oxy-fuel (ethanol blend) use,
  2. The 20 cent per gallon ethanol producer incentive provides payment for ethanol produced,
- Plus**
- ◆ \$550 million was spent for total corn/ethanol plant construction and startup costs.
  - ◆ \$370 million in private sector financing was contingent on local equity capital.
  - ◆ \$180 million in local equity capital was raised by over 8,000 farmer and business members.
  - ◆ \$300 million worth of corn is committed for processing annually by local farmers.

## **C. The goals of the program include:**

1. To build a new market for the state's largest crop (corn).
2. To develop corn processing/ethanol production facilities in Minnesota.
3. To increase the number of New Generation Farmer Coops (NGCs). These businesses were designed to provide farmer members greater direct cash return for their crops.
4. To replace 10% of imported petroleum we use for gasoline. (\$100 million annual savings)
5. To help the Twin City Area meet U.S. EPA standards for carbon monoxide.

## **D. Results to date:**

1. 160 million bu. of corn (20% of MN. crop) is made into ethanol and other products.
2. Minnesota's 14 plants can produce over 300 million gallons of ethanol /yr.
3. Twelve of Minnesota's 14 ethanol plants were organized as NGCs\*\*.
4. Nearly 10% of our gasoline is being replaced by ethanol each year.
5. The Twin Cities Area met EPA's carbon monoxide standard and has recently achieved "attainment" status. The continued use of ethanol was required to keep emissions low.

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## Ethanol Production -vs- Market Penetration

Year	Production <i>mm=million</i>	Estimated Consumption	% MN Ethanol Produced Here
1986	1 mm gal.	25 mm gal	4 % of total
1994	24 mm gal.	125 mm gal.	20 % of total
2000	220 mm gal.	200+ mm gal.	100 % of total

## Ethanol Plants & Capacities in 2001

City & (plant name)	Capacity <i>gallons/year</i>	mm. bushel corn/year	Start- up year	New Generation Co-op** Members
Marshall (MCP)	40 million	15*	1988	4,000
Morris (DENCO)	17 million	6.5	1991	345
Winnebago (Corn Plus)	40 million	15.0	1994	750
Winthrop (Heartland)	30 million	11	1995	692
Benson (CVEC)	21 million	7.8	1996	850
Claremont (Al-Corn)	18 million	6.7	1996	354
Bingham Lake (Ethanol2000)	28 million	10.3	1997	241
Buffalo Lake (MN. Energy)	13 million	5.0	1997	325
Melrose (Protein Products)	2.6 million	cheese whey	1986	(private)
Preston (Pro-Corn)	21 million	8.0	1998	159
Luverne (Corn-er Stone)	20 million	7.4	1998	197
Little Falls (CMEC)	20 million	7.4	1999	820
Albert Lea (Exol/Agri Resources)	40 million	14.0	1999	496
St. Paul (Gopher State Ethanol)	15 million	5.0	1999	(private)
<b>Current TOTAL</b>	<b>325.6 mm gal.</b>	<b>119 mm bus.</b>		<b>9,229 memb.</b>

Processing corn products instead of exporting raw corn doubles the value of each bushel. In addition to fuel ethanol, corn plants produce 1,300,000 tons of high protein livestock feed plus other products including; industrial ethanol, starch, sweeteners and carbon dioxide.

\* MCP can also grind 40,000,000 bushels of corn for starch, sweeteners and other products. Therefore, total corn milling capacity in Minnesota is 160 million bushels, or 20% of the state's average (800 million bushel) corn crop.

\*\* Plants organized as New Generation Farmer Co-ops (NGC) may be combined with, converted to or organized as limited liability companies or partnerships that are generally designed to:

- 1) be built by farmers to process member crops,
- 2) return more cash to farmers than conventional markets would provide,
- 3) be controlled by farmer board members so that farmer profits remain a top priority,
- 4) create a stable source of local jobs and economic development.