Bioenergy: Opportunities for Cooperatives in Marketing Ethanol, Biodiesel and Byproducts

“The Role of Regional Cooperatives”
Cenex Retail Brand

CHS Energy

Gallons sold in FY2006

- Refined Fuels: 2,714,722,993
- Propane: 716,233,756
- Lube Oil: 20,199,317
Ethanol Production

• A bushel of corn yields
  – 17 pounds (2.8 gal) of ethanol
  – Dried Distillers Grain
  – CO₂

Biodiesel Production

• A bushel of soybeans yields
  – 7.35 pounds (1.5 Gal) of soy methyl ester
  – Soy Meal
  – Glycerin

CHS’s Role

Logistics
And
Marketing
Existing Ethanol Production Capacity by State

Total Capacity = 5.1 BG/yr

Ethanol Logistics
Ethanol Logistics

- Trucking
- Rail
- Barge
- Storage
- Terminal Blending
- Future Pipeline?
Biodiesel Logistics

- Heated Trucks
- Heated Rail
- Heated Storage
- Terminal Injection

Cenex Biodiesel Involvement

- **1997**  Tested low blends of biodiesel at 9 cooperative distributors, all of which offered blends of .25%.
- **1999**  Introduction of Soymaster Premium Diesel, containing .25% soy biodiesel, terminally injected at 9 Midwest terminals.
- **2000**  Began offering packaged soy methyl ester in 55 gallon drums and 5 gallon buckets through our lubricants division.
- **2001**  Enhancement of Premium Diesel package to be "soy enhanced" (inclusion of soy methyl ester in the additive packages used in all Cenex premium diesels including Ruby Fieldmaster)
- **2002**  Facilitated the opening of 11 “off site” loading terminals for B100 to increase economical distribution of biodiesel blends. Sales of B100 as well as estimates of 2% or higher blends increase dramatically from previous year.
- **2003**  Introduced the Ruby Fieldmaster B2 Brand (Ruby Fieldmaster splash blended with 2% soy biodiesel). Sales explode to nearly 4 times previous year to date.
- **2004**  Installation of 2% and 5% biodiesel injection systems in McPherson KS, McFarland WI, and Council Bluffs IA. First in the nation to offer finished, terminally injected biodiesel products at a petroleum terminal.
- **2006**  Installation of Biodiesel terminal in Denver, Colorado
Ethanol Marketing

- Began in late 1970's
- Clean Air Act 1990

- Marketed ethanol blended gas through Cenex branded sites since 1978
- Supply over 500 million gallons of ethanol blended gasoline to marketplace.
Marketing Materials

Ethanol Industry Today

- Production Boom driven by Renewable Fuels Standard Mandate
- MTBE Phase Out
- E85 Market Development
Ethanol Production Growth

Total Plants (US)
- Jan 2002  61 (2.1 bgy)
- Jan 2003  68 (2.7)
- Jan 2004  72 (3.1)
- Jan 2005  81 (3.6)
- Jan 2006  96 (4.3)
- Current Estimate:
  - 103 (4.8)
  - 46 U.C. (approx 3.5)

Current Construction
Capacity = 2 bgy!

RFS vs. Ethanol Production

Source: U.S. Energy Information Administration/Renewable Fuels Association
• E-85 Growing in Popularity/Demand
• GM and Ford marketing efforts have created increased awareness
• E-85 supply is dependent on available ethanol and will be affected by strong demand on the coasts/MTBE phase out
• 1000 retail outlets offer E85 nationwide
• 500 of these are within CHS’ core trade area
• Over 200, or 40%, are affiliated with CHS
• CHS currently offers blended E85 at 29 terminals across the midwest
• CHS and GM promotion ($1000 fuel card offer in MN)
• Complete marketing kit available

U.S. Absorption of Ethanol Supply

CHS and E-85

Gasoline

E85
E-85 – Future Brand Position

• Position E-85 within the Cenex Branded Motor Fuel Umbrella of Products

US BioEnergy

• CHS owns 25.6 percent of U.S. BioEnergy of Brookings, S.D.
• Acquisition based on:
  – Size and scale
  – Marketing ability
  – Risk Management tools
  – Plant Management
Geographic Diversification

- US BioEnergy Corporate
  Brookings, SD
- US BioEnergy Operations
  St. Paul, MN
- UBE Services
  Wichita, KS
- US Bio Albert City
  (100 MGY Plant) Albert City, IA
- US Bio Woodbury
  (45 MGY Plant) Lake Odessa, MI
- US Bio Janesville
  (100 MGY Plant) Janesville, WI
- Platte Valley Fuel Ethanol
  (48 MGY Plant) Central City, NE
- Val-E Fuel Ethanol
  (45 MGY Plant) Ord, NE
- US Bio Hankinson
  (100 MGY Plant) Hankinson, ND
- US Bio Springfield
  (100 MGY Plant) Springfield, MN
- US Bio / Big River Resources Joint Venture
  (100 MGY Plant) Grinnell, IA
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* Construction has mobilized
* Under Development
* In Production
* Entered into a letter of intent, there are no assurances that these acquisitions or projects will be successfully completed.

50/50 Joint Venture between
US BioEnergy and CHS

Provista
Renewable Fuels Marketing
Our Growth and Vision...

Ethanol Sales Volume

- One billion gallons of ethanol under contract by 2009
- Grow into Biodiesel marketing

CHS Renewable Fuels Participation

- Ethanol Production via US BioEnergy, with 700 million gallons of production by 2008
- Wholesale marketing of ethanol and biodiesel through Provista Renewable Fuels Marketing 50/50 joint venture
- Retail marketing and distribution of ethanol and biodiesel blended products under the strength of the Cenex brand!
Thank You!