

# 2006 Biobased Industry Outlook Conference

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Growing the Bioeconomy  
University of Iowa  
Scheman Building – Ames, Iowa  
Capitalization Strategies for the Bioeconomy  
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# Overview

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- CoBank is a \$32B financial institution headquartered in Colorado
  - Founded 72 years ago and includes:
    - ✓ 13 Banks for Cooperatives
    - ✓ Farm Credit Banks of Springfield
  - A part of the \$135B Farm Credit System organized by Congress to provide dependable financing to US agriculture
- 11 Regional banking centers throughout the US as well as offices in Washington, Mexico City and Singapore

# CoBank Banking Groups

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## 3 major lending Divisions:

- Global Financial Services Group with loan commitments totaling \$6.1B
- Communication/Energy Banking Group with loan commitments totaling \$9.9B
- Agribusiness Banking Group with total commitments of \$10.8B

# CoBank Biofuels Portfolio

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- Our first ethanol loan was in 1992
- Gross commitments to ethanol and biodiesel exceed \$1.2B, with \$700MM held by CoBank
- Totals include:
  - 26 operating plants and another 15 under construction, with a combined total capacity of 2.1B gallons
  - CoBank financed plants represent about 30% of proposed industry capacity per Renewable Fuels Association
  - In discussion with numerous additional plants, both ethanol and biodiesel



# CoBank Biofuels Portfolio (cont.)

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- CoBank generally leads the credit and acts as servicing agent, but will also participate in financings
- Loan origination and administration centralized through our Omaha office
- Portfolio is classified 100% acceptable



# General Project Requirements

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## Economics

- Access to feedstock at reasonable basis
- Outlet for co-products
- Rail access
- Energy / Utilities (natural gas or coal, electricity, water and waste water disposal)

# General Requirements - Financing

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- Minimum equity criteria
- Maximum debt per gallon
- Minimum working capital / liquidity requirements at start-up
- Term debt structured with revolving component to accommodate cash flow

# General Requirements - Financing (cont.)

- Equity invested before loan proceeds
- Level principal payments – maximum 10-year term
- Additional cash flow-based sweeps after allowed distribution to owners
- Loan covenants to include leverage, working capital, debt service coverage

# General Requirements - Construction

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- Performance bonding and contract payment retainages considered on a case-by-case basis depending on our exposure with/reputation of contractor
- Prefer Fixed-Price Contracts
- Warranty / Guarantee Provisions



# Industry Concerns

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- Significant risks in lending to these industries
- No direct correlation between finished product values and feedstock, or natural gas cost
- No organized market yet to hedge price volatility
- Improved refining process to comply with federal clean air standard without MTBE or ethanol

# Industry Concerns (cont.)

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- Future supply will likely exceed mandated and “economic” demand
- Possible reduced government support which currently favors renewable fuels
- Timetable to commercialize emerging technologies that make current production obsolete or too expensive

# Biofuels Plant Capitalization

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- To date, primary source of capital has been farmers, contractors and ag oriented banks
- 1/2 of US plants have significant farmer ownership
- Most of plants financed by CoBank have farmer ownership
- Early plants – almost exclusively farmer owned

# Farmer Investment in Biofuels Plants

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- Primary motivation was to capture higher price for grain
- Move commodity up the value chain by creating higher value products
- As to return on capital and return of capital, farmers are very patient investors

# Other Investors in Biofuel Plants

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- Other investors will be more demanding creating greater volatility in capital structure
- Annual Venture Capital investment in US:  
\$18 – \$22B
- 2002 – 2.7% for energy projects
- 2005 – 4.2% energy related
- Investors include Goldman Sachs/Berkshire Hathaway/Carlyle Group



# “Perfect Storm” Scenario for Biofuels

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- Passage of 2005 energy bill with 7.5B gallon RFS
- Oil prices as result of Iraq war and Hurricane Katrina
- Phase out of MTBE
- Record corn crop
- As result, unprecedented level of interest in this industry



# Ethanol Returns

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- Iowa State calculates 23% annual return (5 year) for typical dry mill plant
- Pro-Exporter estimates 20% ROI for 50mm gallon plant
- Pro-Exporter estimates 30% ROI for 100mm gallon plant
- 2006 return will be extraordinary
- This will attract significant amount of capital to the industry increasing risk that supply will exceed demand

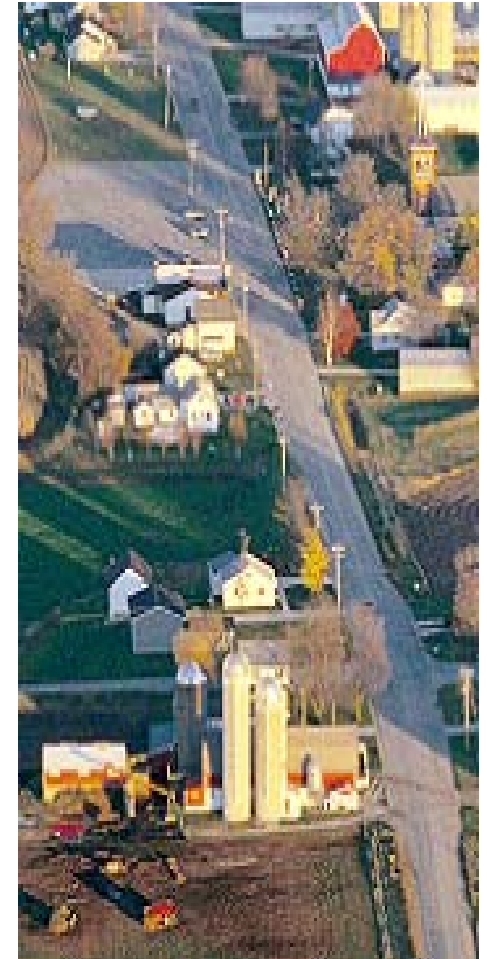
# Ethanol Risks

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- Standard & Poors study 11/04 US Ethanol Industry is Booming, But Risky
- Supply of corn and impact on local basis
  - Plants constructed too close to others than previously felt prudent
- Market for by-products, especially DDGs
- Transportation availability
- Functional obsolescence from current technology
- Capital markets are very rational – significant risk premium built into biofuels loan pricing
  - Pricing has decreased of late as new investors “comfort” with the industry has increased

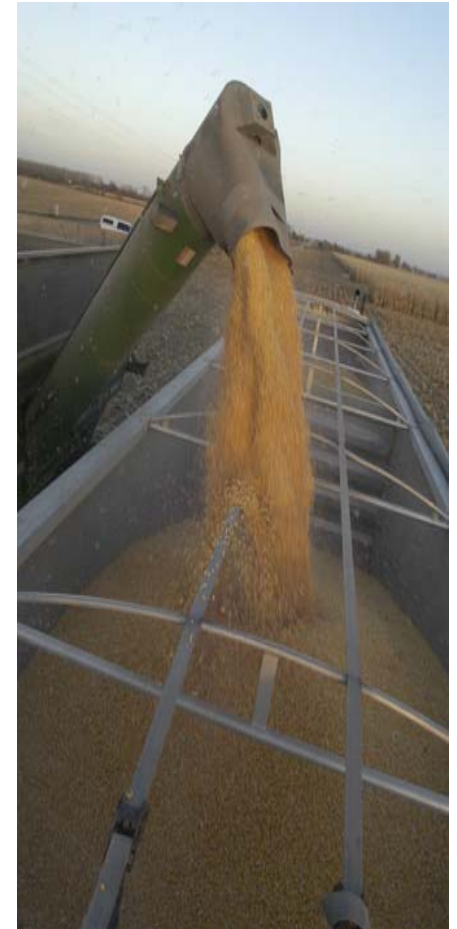
# Impact on Rural America

- Jobs creation
- Less dependence on imported oil
- Investment returns
- Need to reconcile with conservation objectives
- Impact on local grain prices
- Unknown impact on grain flows
  - Shuttle loaders
  - Grain storage
  - Agronomy inputs



# Transportation Challenges

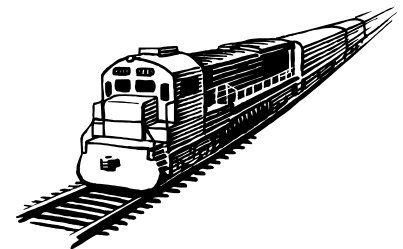
- Pro-Exporter study completed 3/06 stated that moving crops, fuels and co-products represents colossal challenge to transportation sector
- 2015 11B gallon ethanol production from corn
  - Ton-mile demand on western railroads will increase 20%
  - Ton-mile demand on cornbelt local trucking will increase by over 50%



# Transportation Challenges (cont.)

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- Ethanol tank fleet will soon pass 10,000 cars and will more than double
- Problem with parts availability for all types of rail cars
- Rail system is already challenged and transportation rates will increase



# Key Observations

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- CoBank remains committed to and optimistic about the biofuels industry
- Industry will likely be over built leading to volatility in prices and profits
- Need strong capital position to weather increased volatility
- Need lender with knowledge and long term commitment to your industry