



FINANCING for ETHANOL (A “Risky” Business !?)

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AGENDA

Farm Credit System & CoBank

Underwriting Criteria for Ethanol

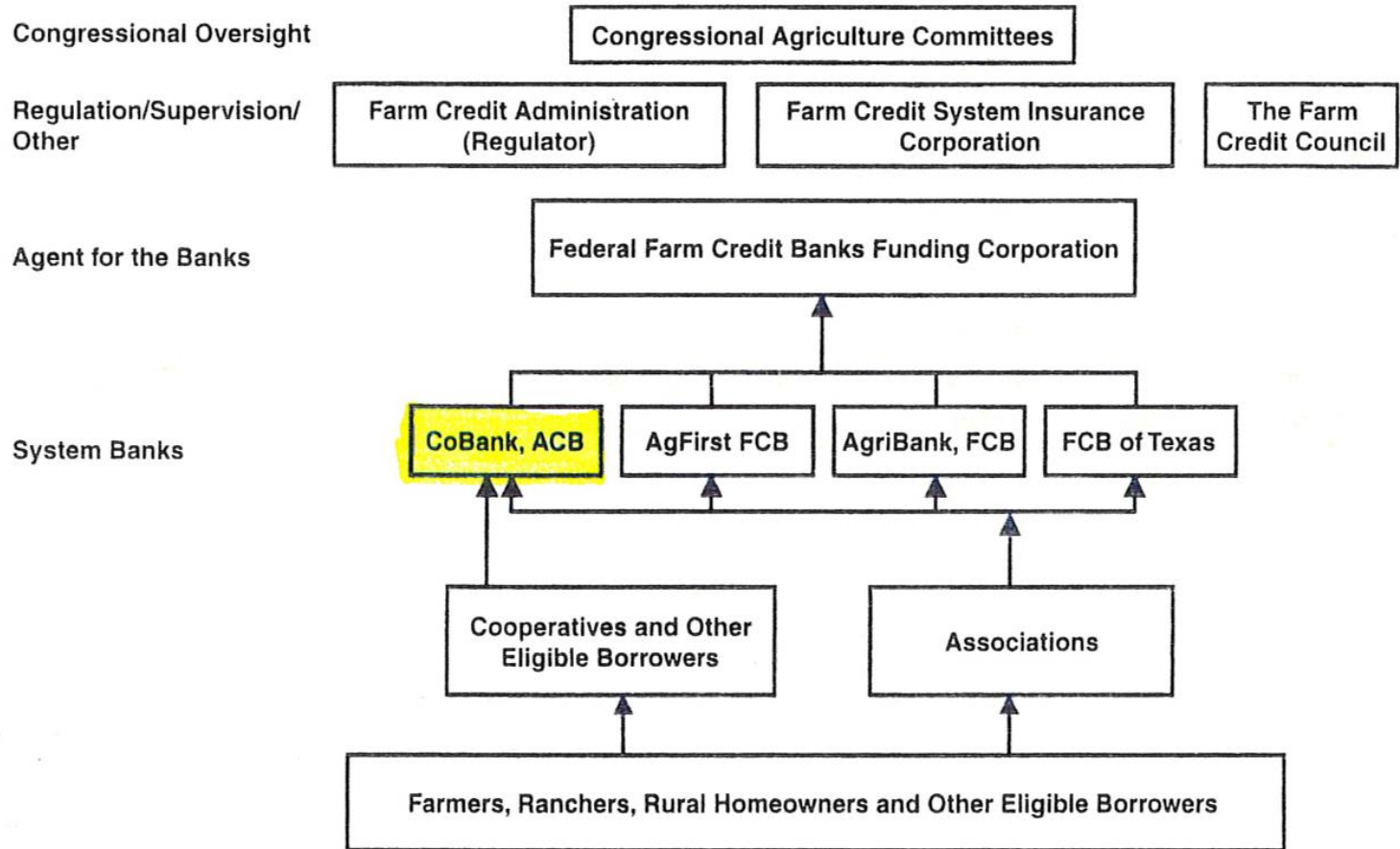
Technology Risks

Go Forward Alternatives – Role For DOE ?

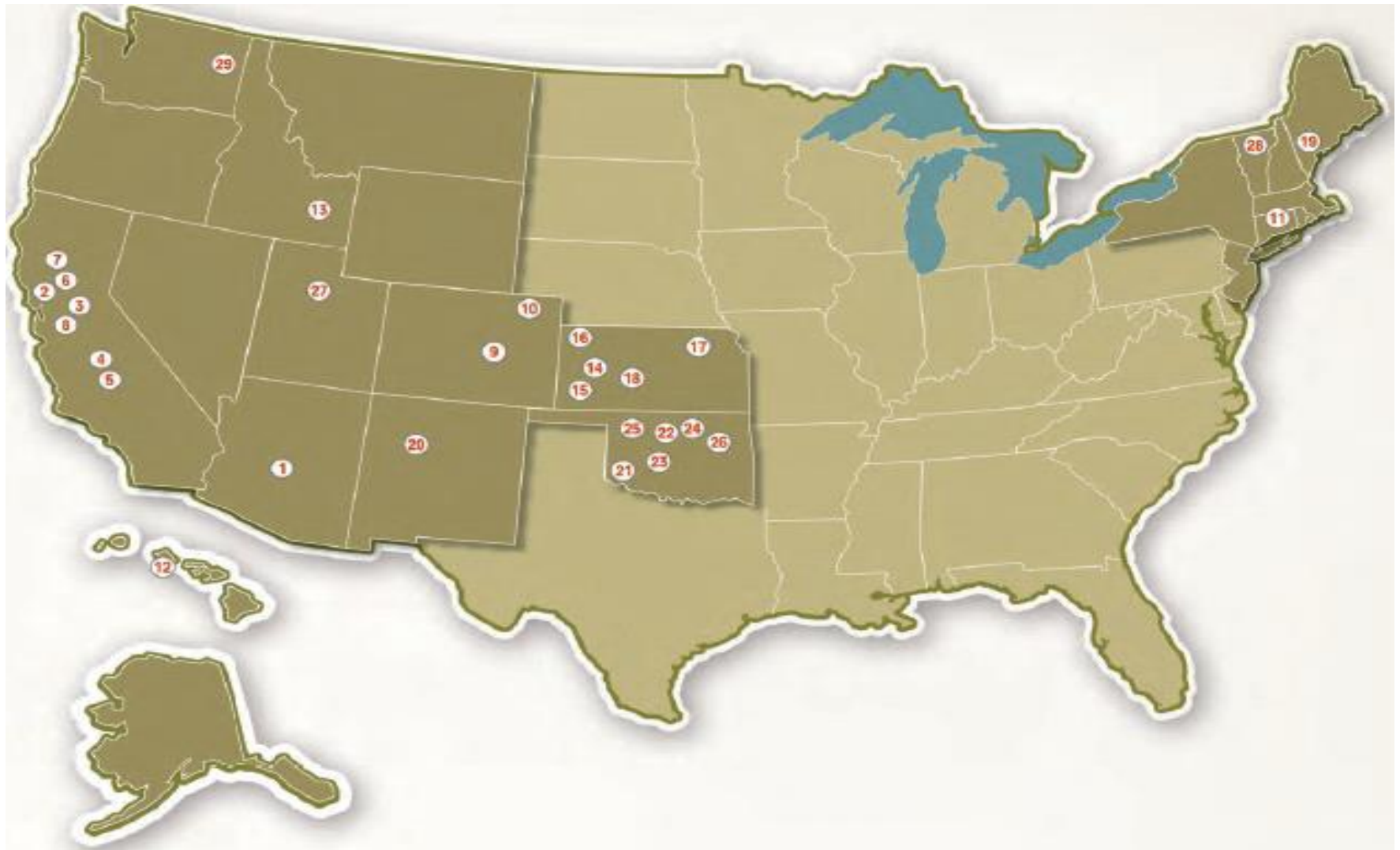
FARM CREDIT SYSTEM

Structure/Ownership of the Farm Credit System

The following chart depicts the overall structure and ownership of the System.



CoBank Affiliated Farm Credit Associations



CoBank at a Glance

- Member of the Farm Credit System, a Government Sponsored Enterprise with \$353 billion in assets at June 30, 2019
- A broad-based cooperative financial services organization serving vital industries across the rural communities of America:
 - Agribusiness (including ethanol)
 - Communications, Energy, Water
 - Community Facilities
- \$138 billion in assets at June 30, 2019
- Cooperatively owned by approximately 2,400 customers
- Headquarters outside Denver, CO; regional offices and banking centers throughout the country, with approximately 1100 employees nationwide



CoBank – Role in the Ethanol Industry

- Lead/Agent Bank for approx. \$1.9B of loan commitments & leases
 - 30+ plants/companies plus POET (26)
 - Presently “hold” approx. \$700M credit “exposure”
- Also \$100M+ of commitments via “participations”
 - Approx. 10 additional plants
- CoBank total net risk/credit “exposure” to ethanol is approximately \$800M
- In ethanol since 1992, and involved with financing 25%+ of the plants and 1/3rd of the gals
- Farm Credit is the dominant (near only) lender to ethanol
- Other FCS Lead Banks include Farm Credit Services of America, Compeer[®] and AgCountry



“UNDERWRITING” CRITERIA

- “LIQUIDITY”* -- Minimum @ \$.20+/- cents/gallon of proven production capacity

- “LEVERAGE” -- Maximum @ \$-0- to \$.60+/- cents/gal

- BUT SUBJECT TO:
 - Production history and P&L results
 - Technology
 - Other Plant Characteristics (i.e., owned grain facilities, plant size, Mid-west location, etc.)

Debt for New Technologies – Zippo, BUT (let me explain)

- “Debt Capital” vs. “Risk (Equity) Capital”
 - Debt -- “expects” to be paid, accepts a fixed rate of return
 - Equity -- no fixed return, but is rewarded (hopefully) for the risk via share in the profits
 - Grants – neither debt nor equity, but serve as risk capital

- Ethanol Industry has been Inherently Risky
 - Supply and demand imbalances
 - Volatile raw material (corn) and finished product (DDG’s/corn oil/etc.) values
 - Politics
 - Etc.

- New Technologies Represent Added Risk (and potential rewards)
 - Construction
 - Technology
 - Economic
 - Collateral

Construction Risk – Can Whatever be Built as Proposed ?

- Project on Budget ?
- Project on Time ?
- Constructed/Built to Specification ?
- Who is responsible (liable) if not ?

Technology Risks – Does Whatever “Work” ?

- To Improve Efficiency/Reduce Costs as Proposed ?
- To Produce the Quantity at the Quality at the Cost Proposed ?
- To Increase Revenue as Proposed ?

Economic Risks – Usually the Biggest Challenge !

- Can the Quantity of Whatever be Sold as Proposed ?
- How Long Before Supply Exceeds Demand, or Does It ?
 - * [Isn't Capitalism Great !?!]
- Can the Whatever be Sold at the Price/Margin Proposed ?
- Does the Whatever Produce the Cost Savings Proposed ?

“Collateral” Risks – Yes, Lenders Think About Such !

- What if Whatever is Built Wrong, Doesn't Work, or is Un-Economical ?
- Can the Whatever be Sold to Another Party ?
- And at What Value vs. the Cost to Build/Buy/“Bolt-on” ?
- Note: a/k/a “Secondary Source of Repayment”

New Technologies WILL BE IMPLEMENTED

- Many Plants/Companies Do Have Borrowing Capacity
 - Those with High Liquidity and/or Low Leverage
 - Sound Financial Position AND History of Profitability and Positive Cash Flow

- Incremental Debt Capacity is Not Available, BUT there IS Capacity

- Subject to Individual Plant/Company
 - Assessment of the “Risks”
 - Risk “Appetite”
 - Financial Capacity
 - Other Strategic Plans

- DOE Role to Facilitate / Accelerate Adoption of New Technologies ?
 - Grants ?
 - Psuedo-Equity Loans ?
 - Other ?

THANK YOU !