

# What We Know What We Need to Know

about  
Risk, Infrastructure,  
and Industry Evolution

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# The Goals of this Workshop

- Inventory current knowledge
- Highlight lessons learned to date
- Identify future possibilities and challenges
- Determine information needs for the future



# Subjects We Hoped to Cover

- Risk management strategies, including contracting, at the farm & processor levels
- Ownership/business structure and financing issues
- Distributional impacts
- Infrastructure issues
- Development of the second-generation industry



# Current Experience is Corn Ethanol

- How will what we have learned help us in the production of cellulosic ethanol?
- What will be likely changes in transportation and market structure?
- What will be needed changes in finance, insurance, and contracts?
- What will be tradeoffs between traditional agricultural production and dedicated energy crops?



# What I learned

- The optimal energy portfolio will depend on criteria
  - Risk reduction
  - GHG emission reduction
  - Energy security
  - Rural development
  - Farm income support



# What I learned

- Inventories will determine the impact of price changes – particularly for the poor.
- Investing in yield increases for all important crops will relieve some pressure in the food vs. fuel debate.
- Growing global demand for crude oil and livestock products will sustain high prices.
  - This is not what the public wants to hear.



# What I learned

- “It is easier to make bad legislation than it is to make good legislation.”
- Policies designed to nurture an infant industry may impede the development of a mature industry.
  - “Failure to launch”
  - Policy design may need to include a credible policy termination strategy



# What I learned

- There are policy & political uncertainties that exist with the implementation of EISA and the Farm Bill.
  - The election is between draft and final rules.
  - Even if both candidates support renewable energy, interpretation of language will be different – so who would invest now?





# What I learned

- Rural communities differ in their ability to capture benefits of bioenergy production.
- Optimal plant location will depend on access to
  - Markets
  - Raw materials
  - Technology/Infrastructure
  - Capable people
  - Money/financing



# What I learned

- Farm households more dependent on rural communities than rural communities are dependent on farming.
- Farmers don't understand what business they are in.
  - New contract arrangements
  - Sale of production rights rather than cash crop.



# Next Steps

- What data do we need to answer all the questions about risk, infrastructure, and industry evolution that we posed at this workshop?
  - Agricultural Resource Management Survey (ARMS) and the Agricultural Census can collect some farm-level data. Which data are most important?
  - How can we cooperatively create and share data?



Next

# Transition to a Bioeconomy Workshop

- Environmental & Rural Development  
Impacts
  - October 15-16, 2008
  - St. Louis, Missouri



# *Thank You*

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