

Illinois Carbon Capture & Storage Project



Carbon Sequestration Leadership Forum

November 4, 2015

Scott McDonald

Biofuels Development Director

scott.mcdonald@adm.com

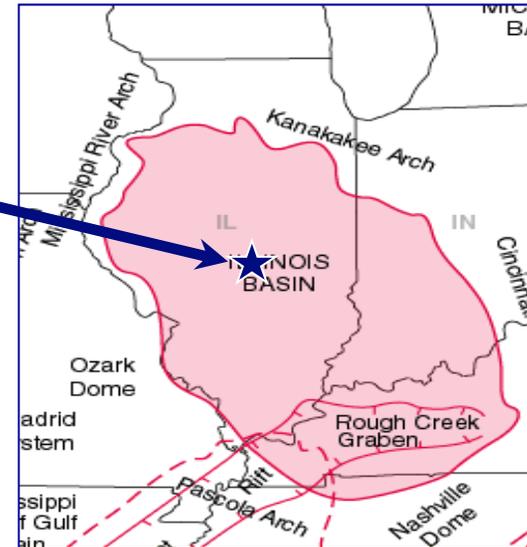




Project Site Attributes

Location

Center of Illinois Basin
Covering 60,000 Mile²
Site Characterization
40-100 billion tons



Available CO₂
1 Million Gallons Ethanol
3,000 tons of CO₂
99.9% Purity



Technical Attributes

Technology

“Off the Shelf”

Modular Design

Low Risk/Low CAPEX

Site Integration



Operation

Minimal Conditioning

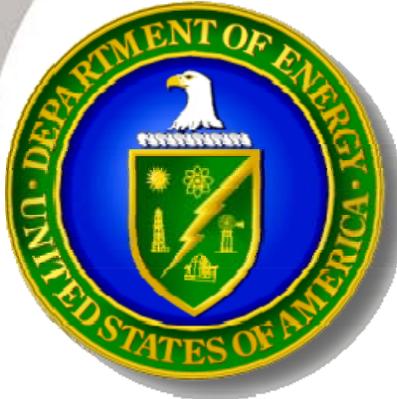
Advanced Automation

Low Surveillance

Low OPEX



Policy/Financial Drivers



Industrial CCS Program

\$141 Million DOE Grant

\$66 Million Project Team

Reducing Capital Risk

45Q Tax Credits

\$20 MT - Geologic Storage

\$31 MT - Revenue Basis

75 MMT Cap - first come first serve

34 MMT Claimed (June 2015)





Regulatory Framework/Drivers



UIC Class VI Program

*Defined Rules and Guidance
Built on Existing UIC Program
MVA, PISC, & Site Closure
No Long Term Liability Waiver*

Clean Power Plan

*30% reduction in CO₂ by 2030
Limits CO₂ per gross MWh
New Coal Fired Unit Needs CCS*





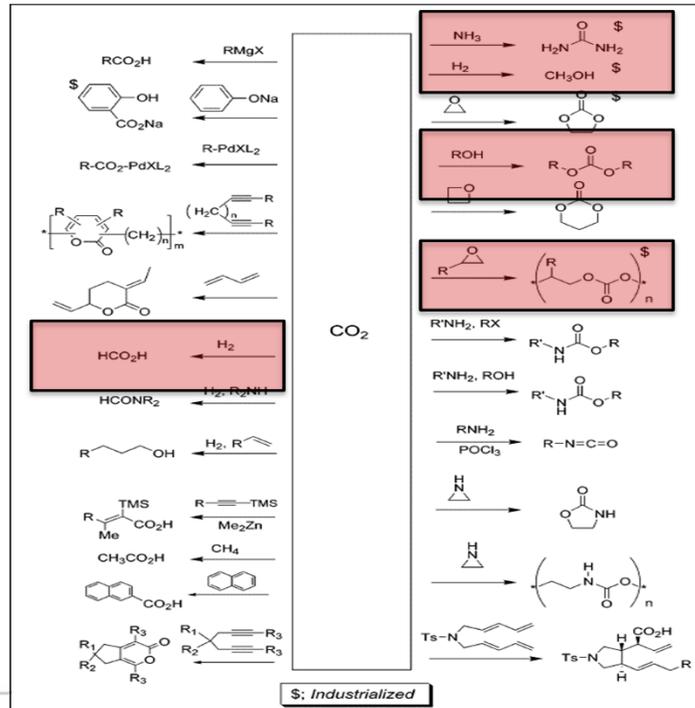
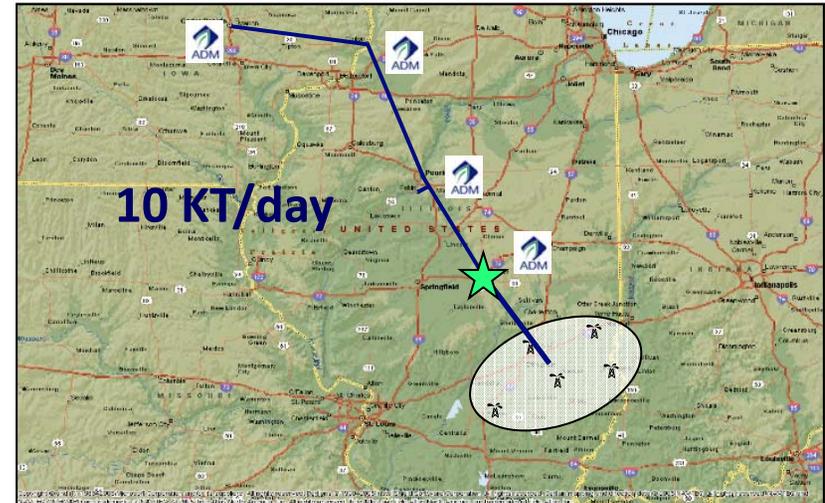
Future Business Potential

EOR

Recovery 700 MMbbbls⁽¹⁾

CO₂ Usage 150 MMT

(1) BASIN ORIENTED STRATEGIES FOR CO₂ ENHANCED OIL RECOVERY: ILLINOIS AND MICHIGAN BASIN OF ILLINOIS, INDIANA, KENTUCKY AND MICHIGAN; Advanced Resources International, February 2006



CO₂ Chemicals

Carbonates

Glycerol Carbonate

Propylene Carbonate

Dimethyl Carbonate

Fertilizers/Acids/Alcohols



Thank You!

Industrial Carbon Capture and Storage Project:

- U.S. Department of Energy Award No. DE-FE-0001547
- Administered by the DOE's Office of Fossil Energy
- Managed by the National Energy Technology Laboratory
- DOE cost share from American Recovery and Reinvestment Act of 2009

Cost Share Agreements:

- Archer Daniels Midland Company
- University of Illinois through the Illinois State Geological Survey
- Schlumberger Carbon Services
- Richland Community College

(Disclaimer: Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.)