

# CTL Project Developer Perspective

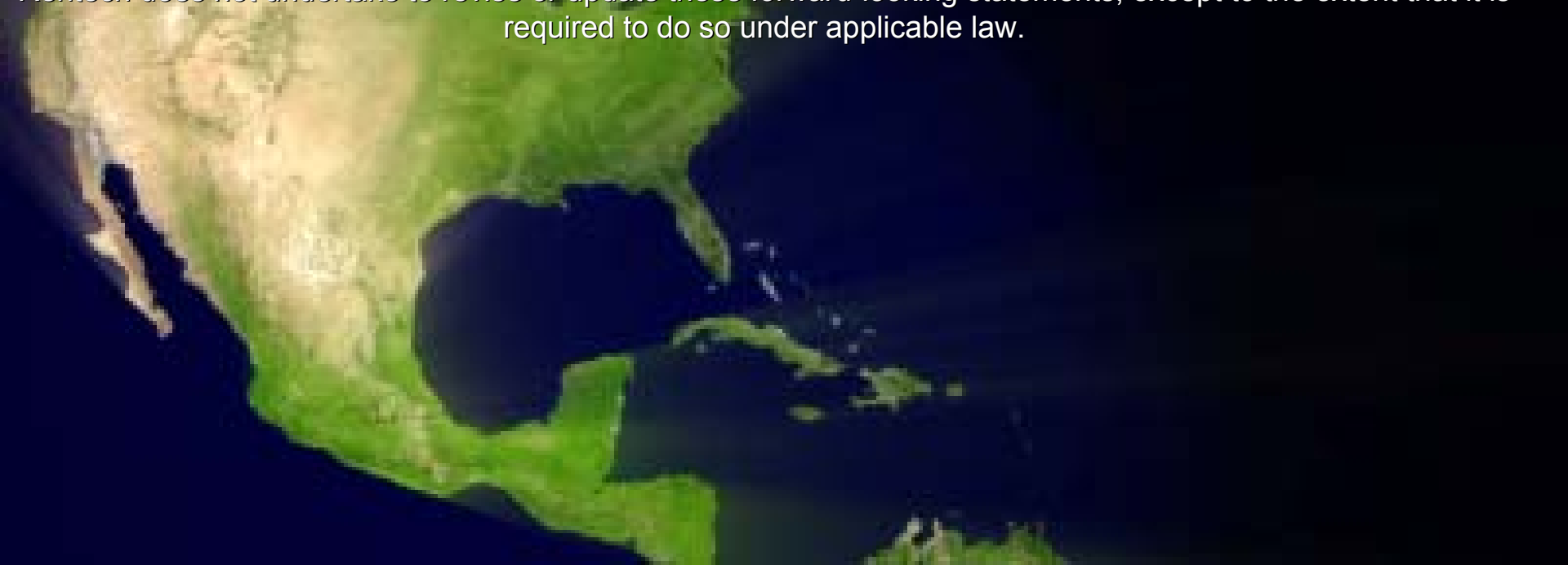
## Coal-to-Liquids Coalition



Rentech, Inc.  
August 15, 2007

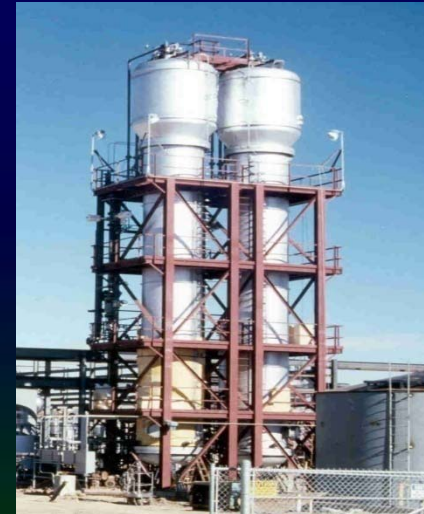
### **Safe Harbor Statement**

This presentation contains forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995 about matters such as the Company's plans to convert its nitrogen fertilizer plant, construct a product development unit, develop additional projects and the projected economics of such projects. These statements are based on management's current expectations and actual results may differ materially as a result of various risks and uncertainties. Other factors that could cause actual results to differ from those reflected in the forward-looking statements include, the ability of Rentech to have the financial means to fund the proposed conversion and construction of the fuels plants, whether Rentech's proposed product development unit will operate successfully and other risks, including those set forth in the Company's press releases and periodic public filings with the Securities and Exchange Commission, which are available via Rentech's web site at [www.rentechinc.com](http://www.rentechinc.com). The forward-looking statements in this presentation are made as of date given, and Rentech does not undertake to revise or update these forward-looking statements, except to the extent that it is required to do so under applicable law.



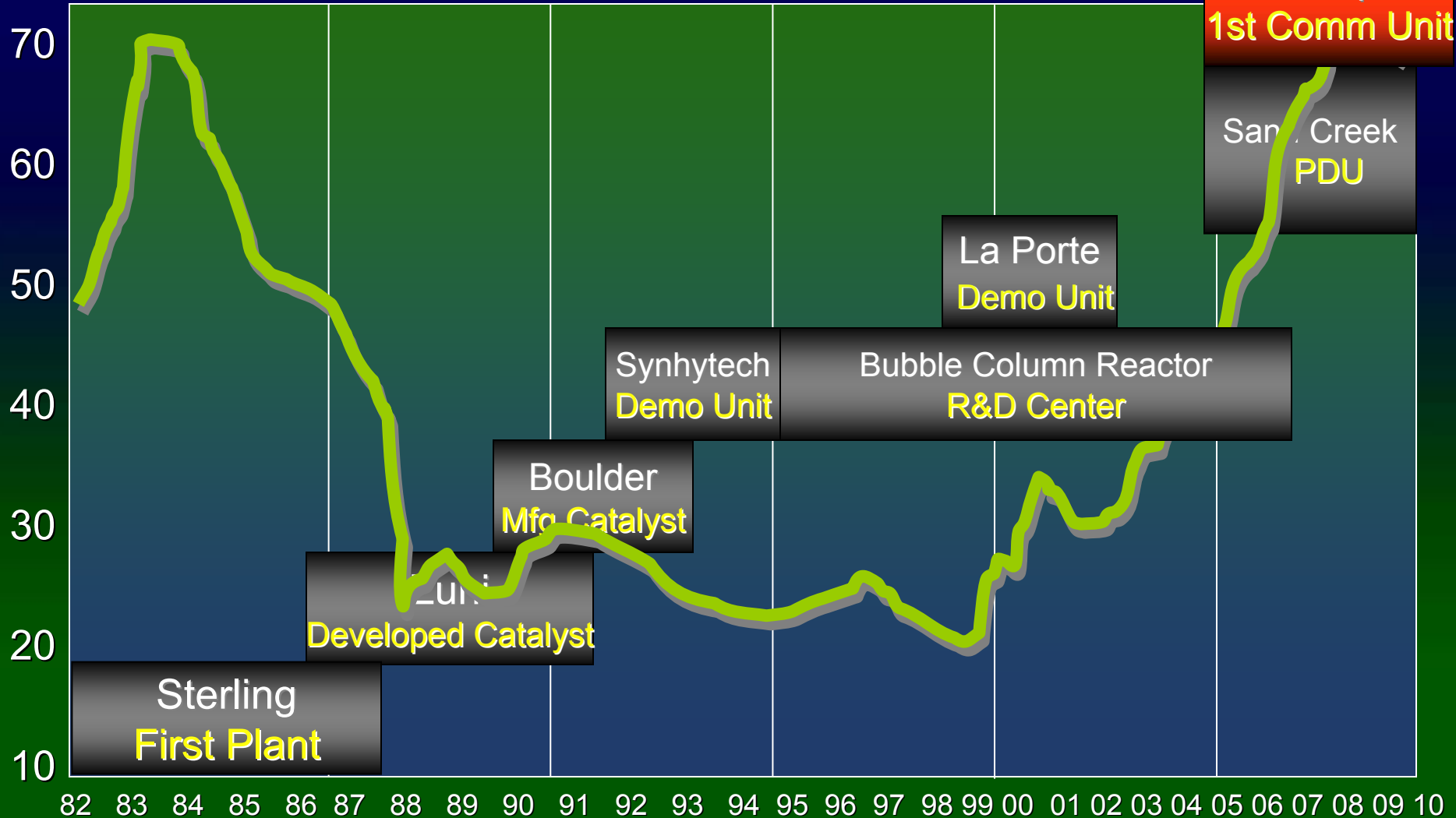
# Rentech – US Leader in Fischer-Tropsch (“FT”) Technology

- Environmentally sound
  - Rentech technology is CO<sub>2</sub> capture-ready
  - FT fuels have lower regulated emissions than petroleum diesel
- Proven and superior FT Technology
  - 25 + years of FT technology development
  - 21 US patents, with others pending
- Successfully deployed in operating facilities
  - 6 pilot plants
  - Constructing fully-integrated 10 bbl/d FT unit (“PDU”)
- Strong basis for execution
  - Clear strategy
  - Experienced management



# Why FT? Why Now?

Crude Oil, 2005 \$/bbl



E. Dubuque, IL  
1st Comm Unit

San. Creek  
PDU

La Porte  
Demo Unit

Synhytech  
Demo Unit

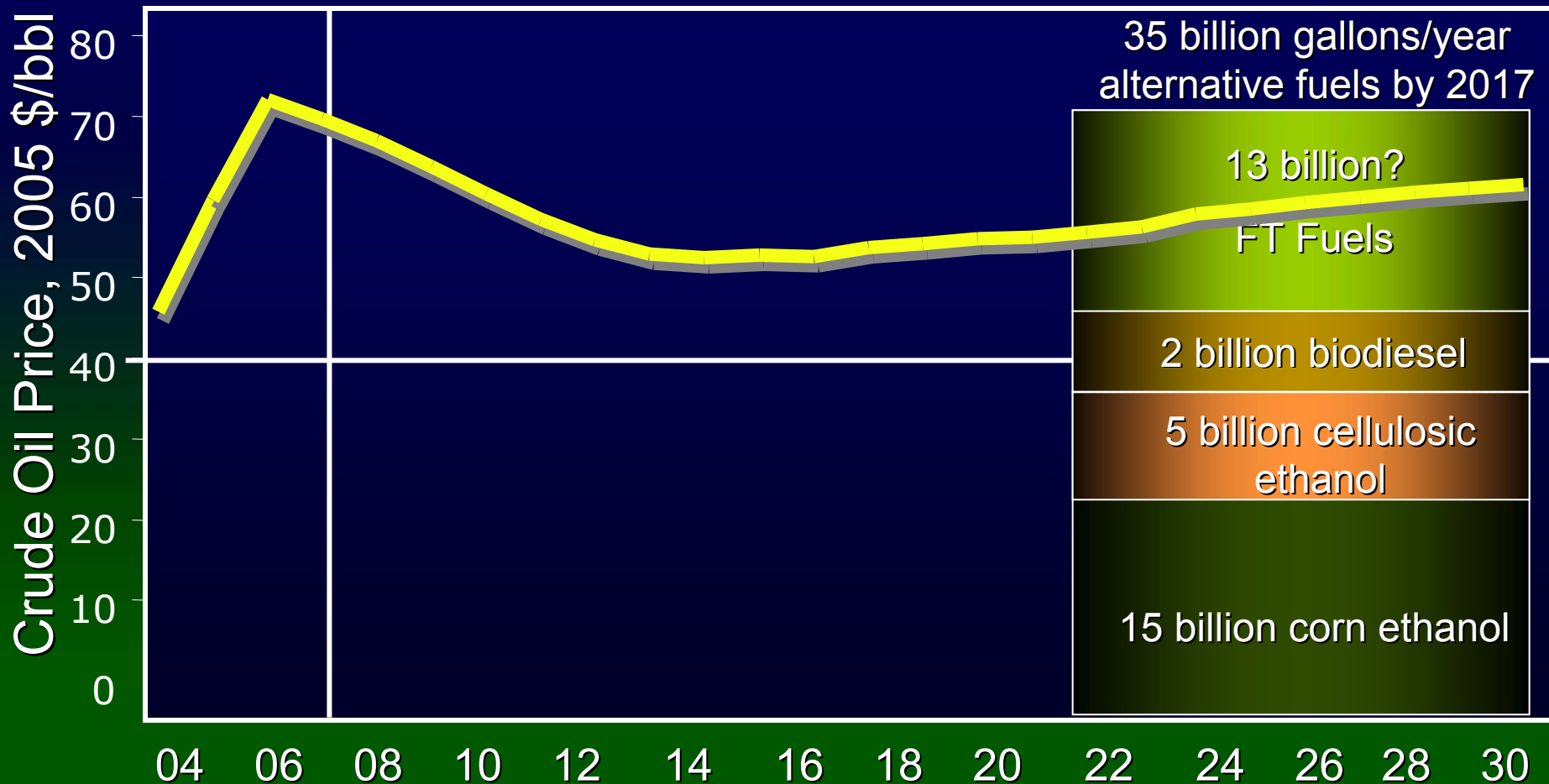
Bubble Column Reactor  
R&D Center

Boulder  
Mfg Catalyst

Developed Catalyst

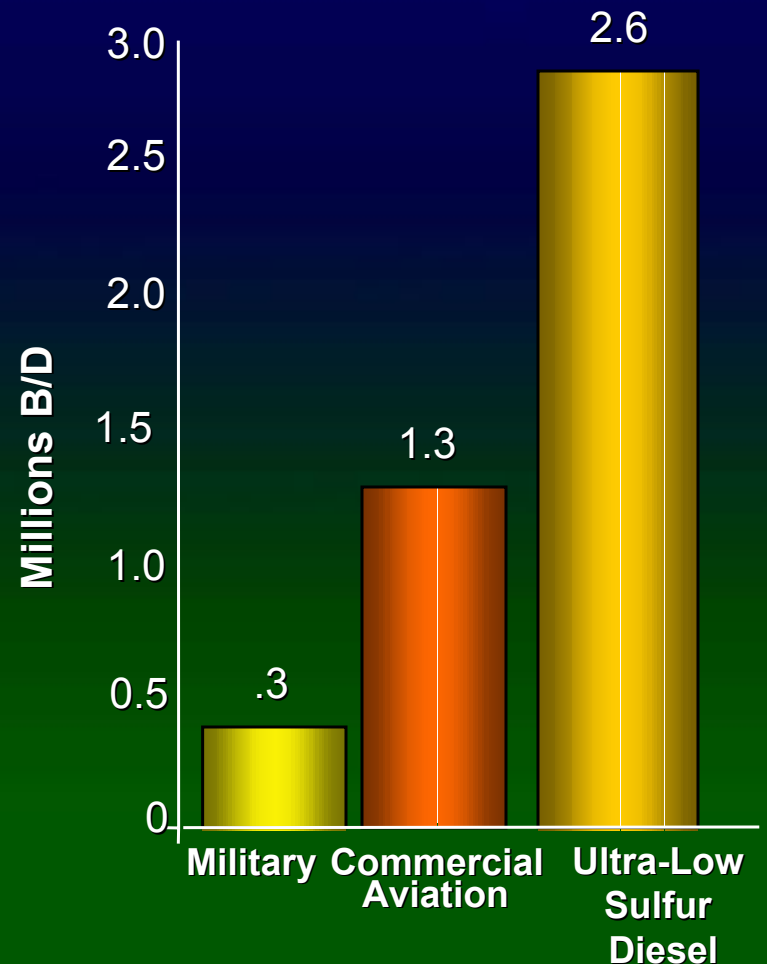
Sterling  
First Plant

# Opportunities Remain over Next Two Decades



# Rentech FT Market Opportunity

- Diverse and high value set of products derived from Rentech Process
  - JP-8 and jet fuel
  - Specialty chemicals - surfactants
  - Ultra low sulfur diesel fuel
- Military consumption of fuel
- Pentagon target to purchase 50% of its aviation fuel needs from domestic synthetic sources by 2016



# Technology Advantages

## Feedstock Flexibility

- Wide range of potential feedstock, including coal of various qualities, petroleum coke, natural gas, municipal waste and biomass

## Lower Costs

- Slurry reactor
  - Higher on-line time and throughput
  - Lower pressure drop and excellent temperature control
  - Ease of scale-up

## Stable Performance

- Iron-based catalyst
  - Higher diesel production
  - Significantly lower risk of sulfur poisoning
  - Lower cost with simple disposal

## Flexible

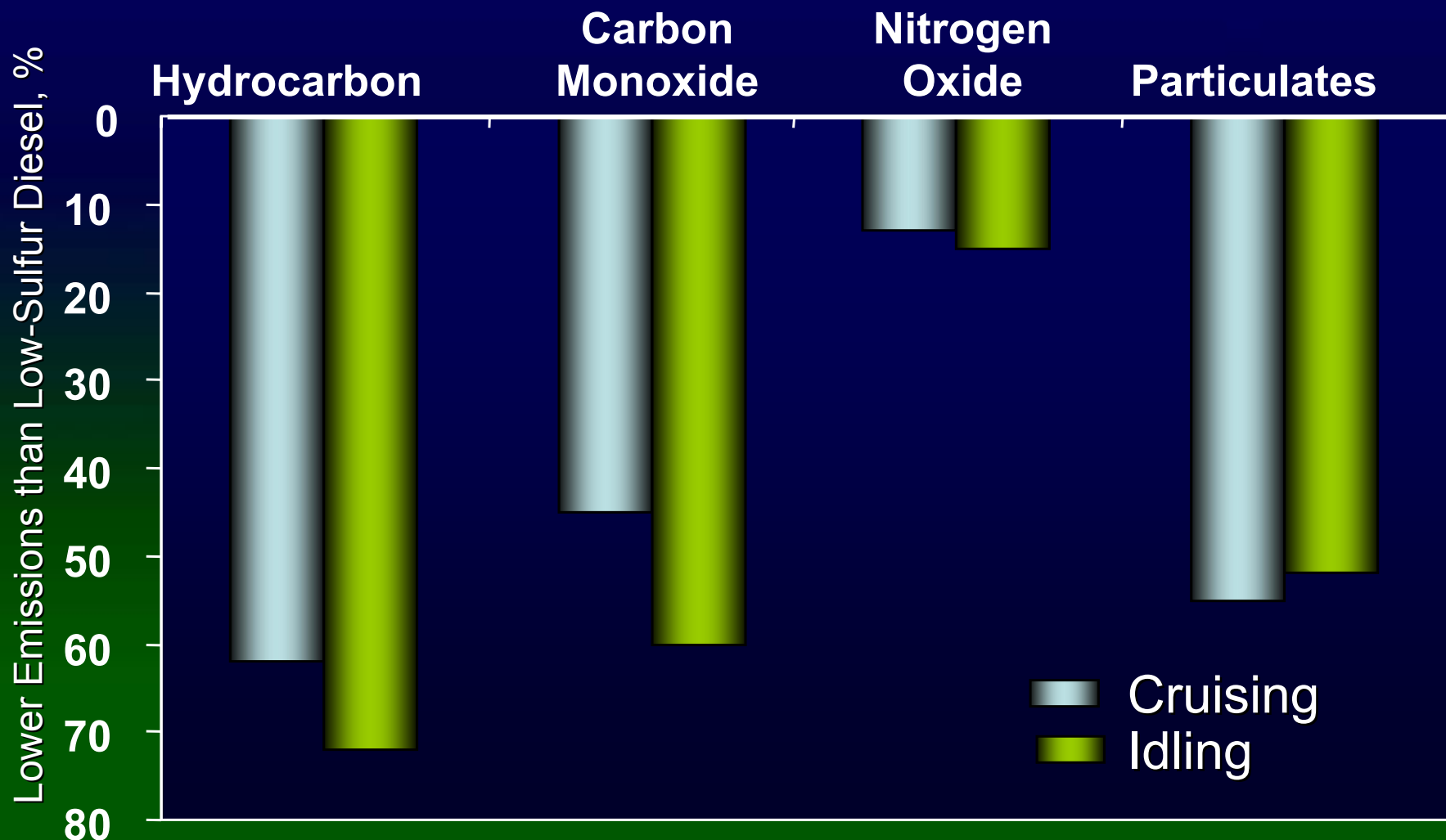
- Can use multiple commercially available proven technologies on front and back-end

# Ultra-Clean Fuel

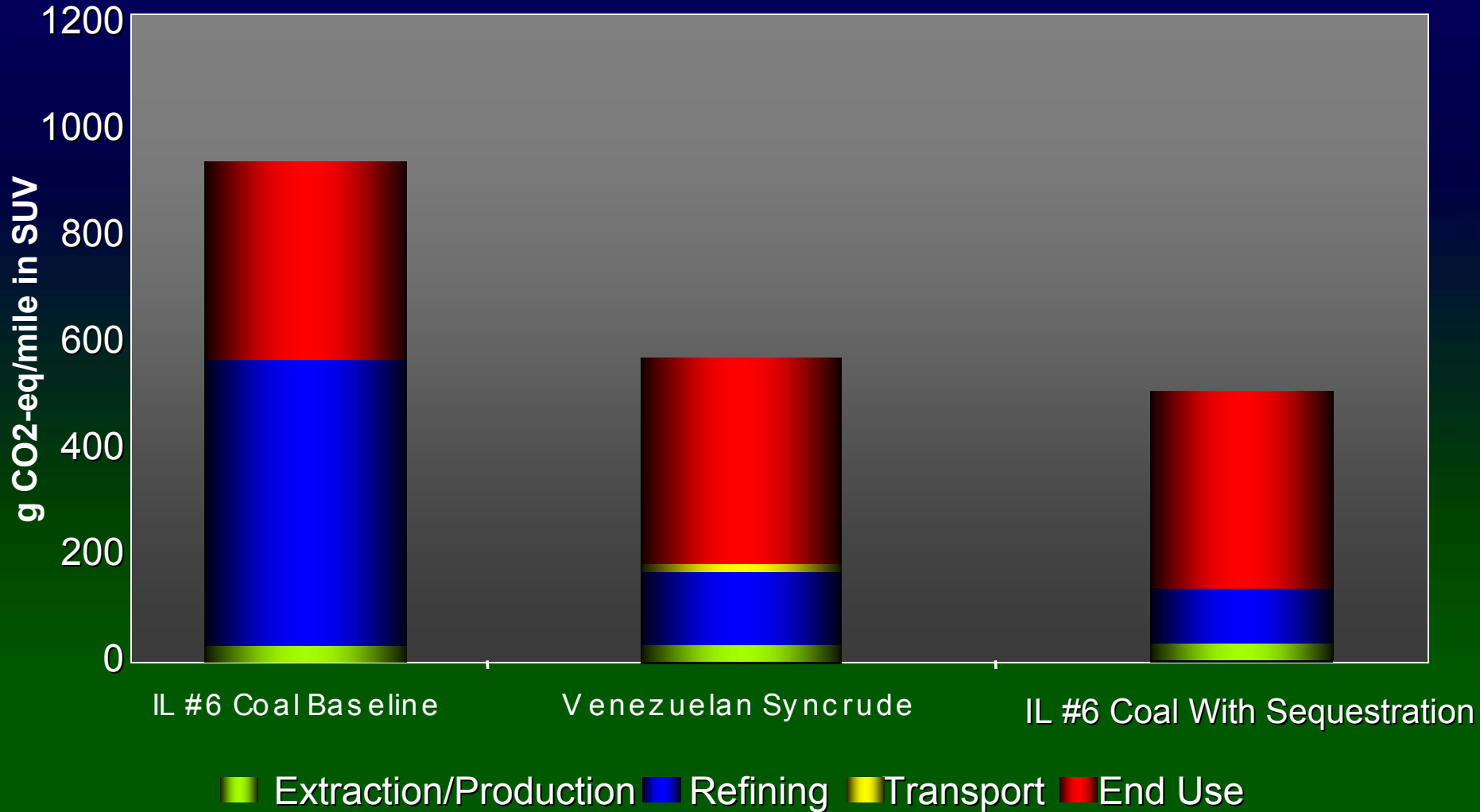


- High Performance
  - Higher cetane index improves engine performance
- Existing infrastructure
  - Today's pipelines
  - Today's engines
- Environmentally superior fuel
  - Significant emissions reduction
  - Exceeds global sulfur and aromatics requirements
- Storage stability
  - Long shelf life ( $\geq 8$  years)
- Biodegradable

# Lower Regulated Emissions



# Less Carbon Dioxide Wellhead to Wheels



# Why Coal?

- Most economic
- Most abundant resource
- Economies of scale of coal conversion
- Low cost of feedstock
- Aggregate large quantities
- Use existing infrastructure

**With carbon capture and sequestration, greenhouse gas footprint of FT fuels are comparable to or lower than that of petroleum-derived fuels**

# Carbon Reduction Plan

- Test various biomass feedstock at Production Development Unit
- Install commercial biomass gasification unit at Rentech Energy Midwest Corp to produce 500 – 700 bpd of FT fuels from biomass
- Produce FT fuels on a large commercial scale through a co-feed of biomass with coal or petroleum coke
- Produce renewable ultra clean synthetic fuels at small scale standalone biomass facilities

**Objective: Further reduce greenhouse gas footprint of FT fuels to a level significantly below that of petroleum-derived fuels**

# Strategies and Execution

## Strategy

- Accelerate deployment of the Rentech Process
- Develop strategic projects in the U.S.
- Develop a repeatable and scalable process
- Maintain FT technology leadership
- Expand the reach of the Rentech Process

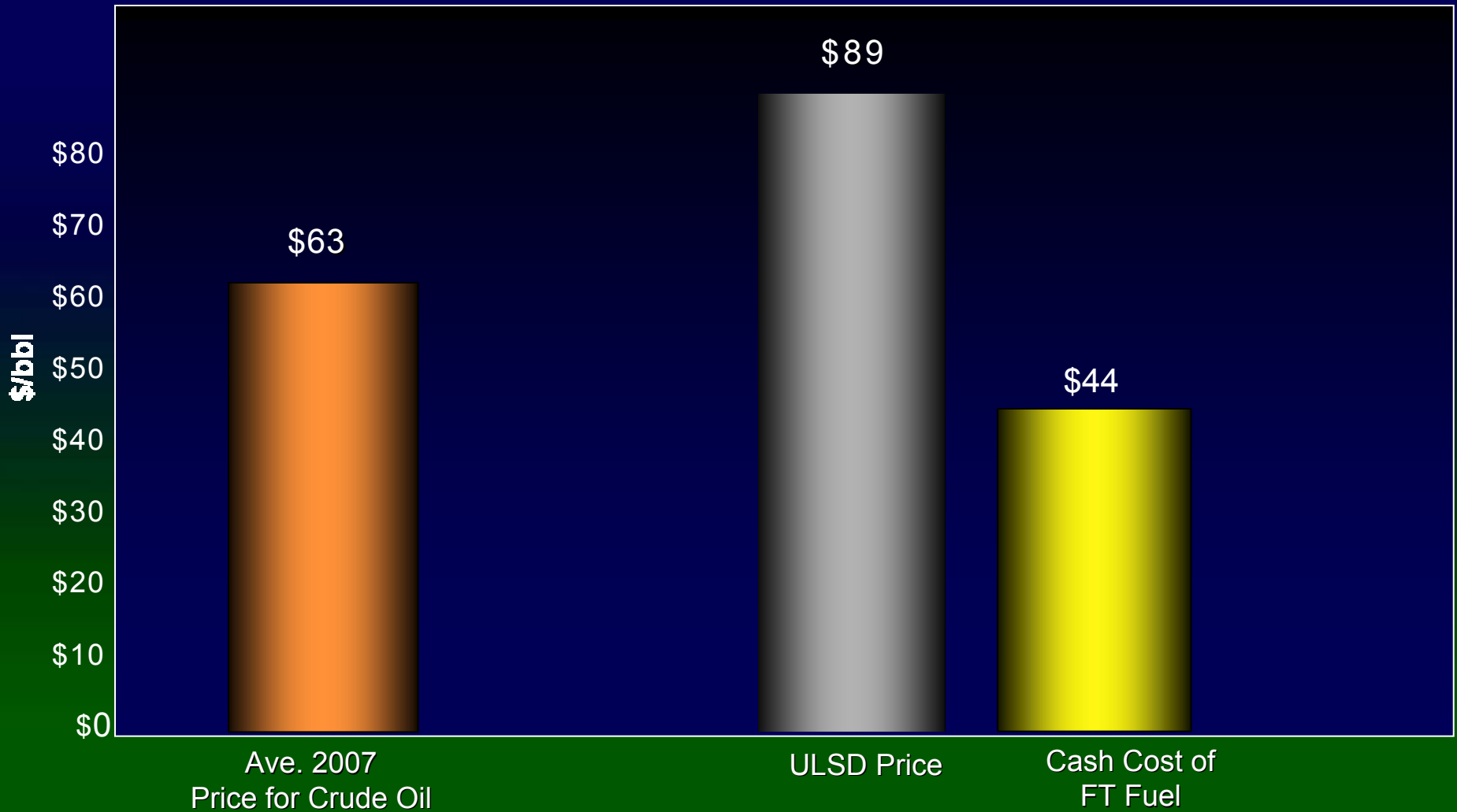


## Execution

- Acquisition and conversion of operating ammonia fertilizer facility to accelerate time to market
- Facilitate use of the Rentech Process at multiple sites
- Expandable in standard increments
- Continued innovation through research and development
- Domestic and International Licensing on selected basis

**Objective: Establish Rentech as the leading North American FT company.**

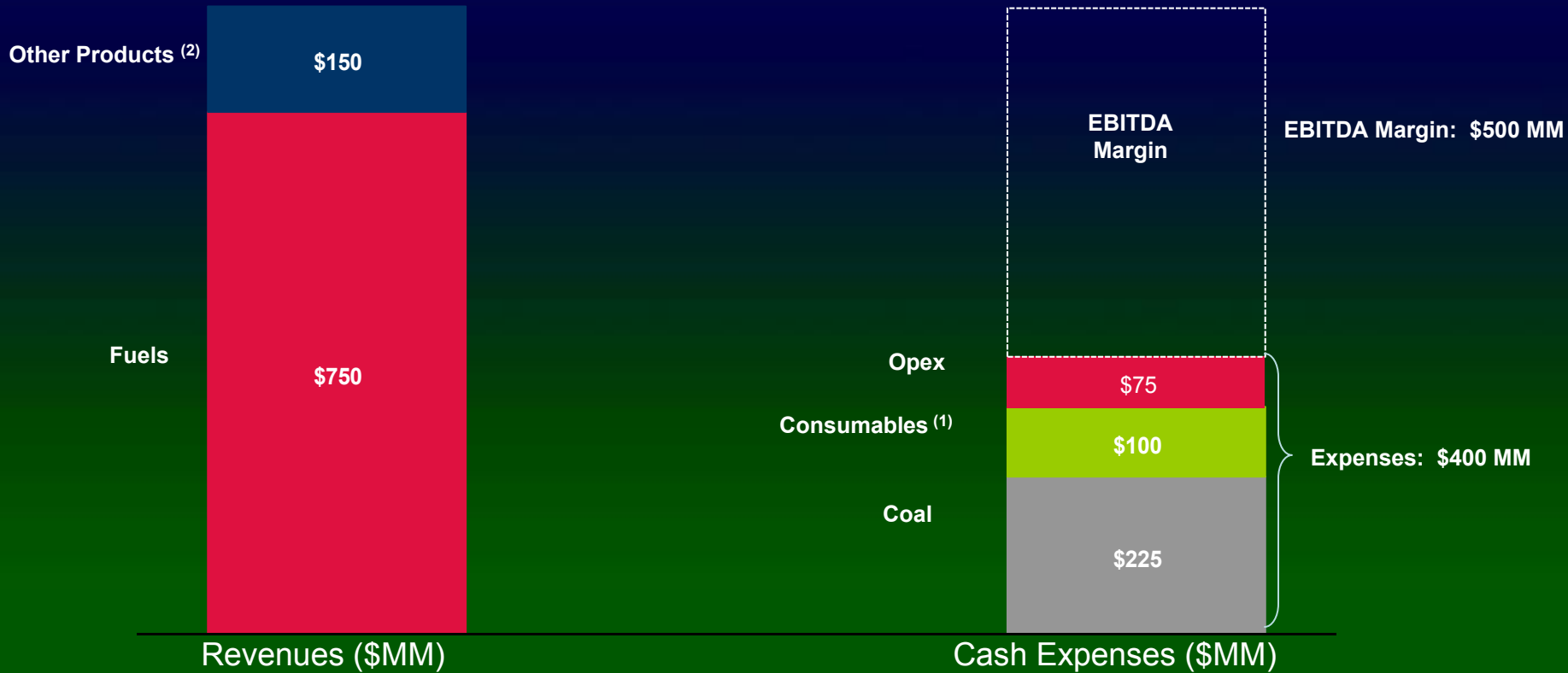
# Competitiveness of Coal-Based FT Fuel



# Typical Greenfield Project Economics

Greenfield FT Project – 30,000 bbls/d

Total Revenues: \$900 MM



Note: All figures estimated on an annual basis.  
 Production assumed at 93% capacity.  
 Assumptions: 12.5% premium to ULSD; \$61/barrel crude price; \$45/ton coal

(1) Includes oxygen, FT catalyst, and royalties.  
 (2) Includes Argon, krypton, xenon, propane and butane.

# Product Development Unit

## Sand Creek, Colorado



- First fully-integrated FT biomass-coal-to-liquids facility
- Produce ultra-clean diesel, aviation fuels and naphtha
- Provide product for testing
- Training center for operators including safety procedures
- Feedstock testing
- Technology advancement
- Validate technology scale-up
- First production in Spring 2008

# Developer's Perspective

- Site
  - Land
  - Water
  - Transportation
  - Power
  - CO<sub>2</sub> solution
- Financing
  - Product markets
  - Feedstock supply
  - Partners
- Government Support
  - Regulatory certainty
  - Risk management
  - New industry initiation
- Facility
  - Technology
  - Configuration
  - Cost

# First U.S. Commercial CTL Plant East Dubuque, Illinois



## Rentech Energy Midwest Corp.

### Existing Facility: Nitrogen Fertilizer Production

- Uses natural gas as input
- Production of 830 tons per day
- 40-year operating history

### Conversion

### Future Facility: Nitrogen Fertilizer & Clean Fuels

- Capacity to produce up to 1,000 tons/day of ammonia and 2,000 barrels/day of clean fuels and chemicals
- Less expensive and more price-stable input
- Develop market for clean fuels and chemicals
- Plant will remain open through conversion process

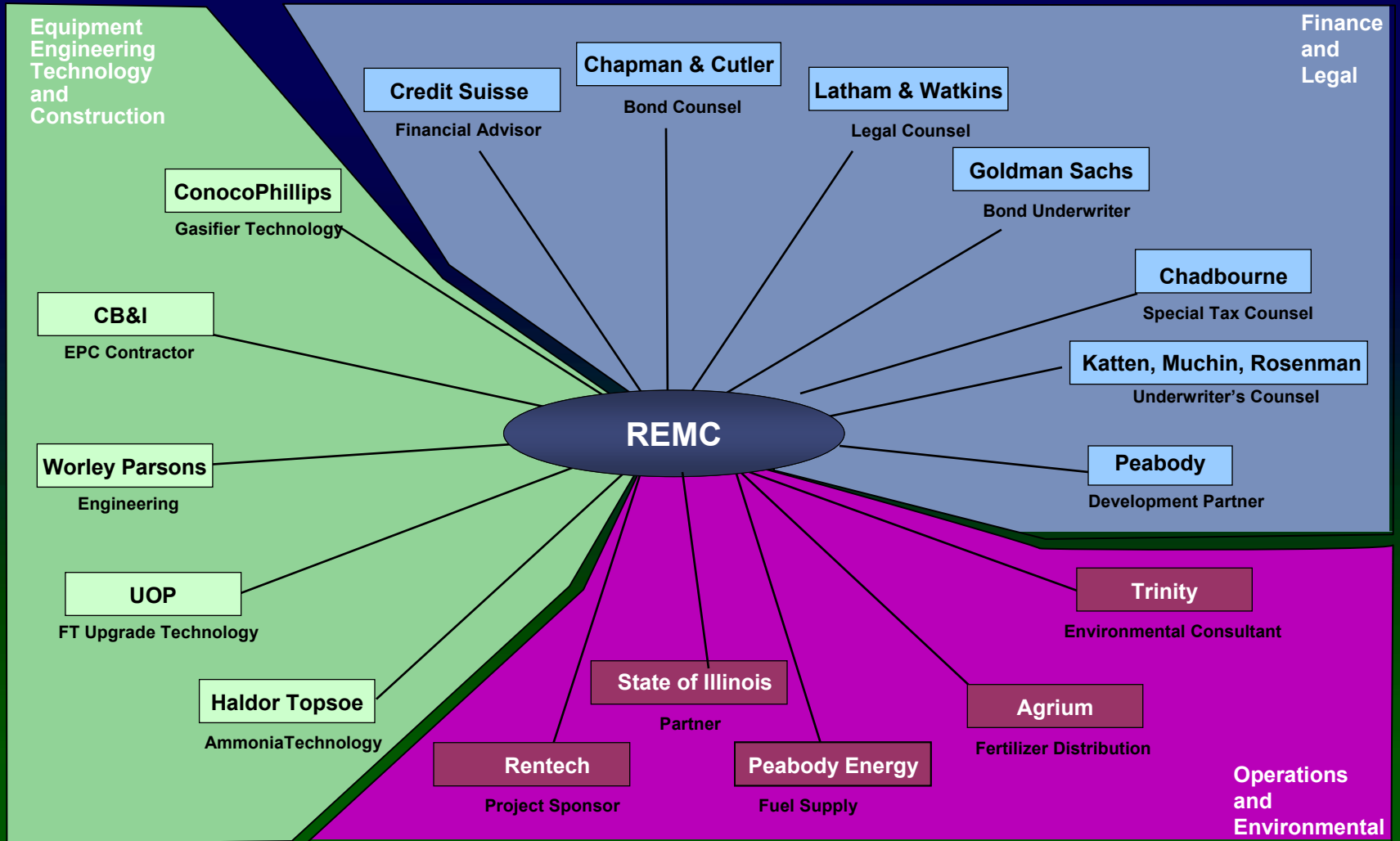
The East Dubuque plant enables Rentech to accelerate FT technology deployment

# REMC Project Timeline and Scope

- Phase 1 – Install coal gasification unit (plus spare)
  - Produce syngas for manufacturing up to 1,000 tpd of ammonia fertilizer
  - Expected cost: \$800MM
- Phase 1A – Add Rentech’s proprietary CTL technology
  - Use the Rentech Process to produce up to 2,000 barrels/day of synthetic fuels
  - Expected cost: \$100MM
- Phase 2 – Scale-up opportunity exists to add biomass gasification unit and additional clean fuel production capacity
  - Produce incremental 500 – 700 bpd of FT fuels from biomass

	2007				2008				2009				2010				2011				2012			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Phase 1 Coal Gasification Unit Producing Ammonia Fertilizer <i>Construction to Start-Up</i>																								
Phase 1A - FT Unit to Produce Ultra-Clean Motor Fuels <i>Construction to Start-Up</i>																								
Phase 2 - Biomass Gasification Unit <i>Construction to Start-Up</i>																								

# REMC Project Team



# Rentech Strategic Fuels & Chemicals Complex Natchez, MS

- Land optioned and due diligence in progress
- Feasibility study underway
- Inducement for up to \$2.75 billion in tax-exempt and taxable bonds approved
- Signed CO<sub>2</sub> off-take agreement with Denbury Resources, Inc. for all captured CO<sub>2</sub> at facility
- Produce FT fuels on a large commercial scale through co-feed of biomass with coal or petroleum coke
- 25,000 bpd plant (with potential to expand to 50,000 bpd) expected to be completed in 2012

# Mingo County, West Virginia

- Rentech and Mingo County Redevelopment Authority entered into Joint Development Agreement for the potential development of an FT plant to be located in Mingo County, West Virginia
- Biomass and coal-to-liquids facility
- Up to 30,000 bpd plant
- Currently in feasibility phase
- Application for grant with the Appalachian Regional Commission selected for funding consideration
- Strong local, state and federal support

# Montana and Illinois Basin

- Rentech and Peabody Energy entered into Joint Development Agreement for the co-development of two potential CTL Plans
- Intend to make use of Peabody's reserves in Montana and Kentucky
- Benefits of mine-mouth facilities include improved logistics and lower feedstock costs
- 10,000 bpd and 30,000 bpd CTL plants
- Recently awarded grant from Commonwealth of Kentucky to help fund feasibility study
- Currently in scoping and feasibility phases

# DKRW

## Medicine Bow, Wyoming

- Rentech signed Master License Agreement with DKRW Advanced Fuels LLC for use of Rentech's FT technology
- Proposed plant in Medicine Bow, Wyoming
- Construction to begin in 2008
- Funding to be completed in mid-2008
- 13,000 bpd facility with potential expansion of up to 35,000 bpd, to be completed in 2011
- Currently in FEED phase
- Currently negotiating EOR opportunities for captured CO<sub>2</sub>
- Master License Agreement is for up to 500,000 bpd

# Greenhouse Gases and FT Fuels

- FT Fuels are part of the GHG management solution
- FT plants will:
  - Reduce GHG emissions versus oil
  - Provide foundation for investment in GHG management and sequestration process and technology
  - Provide near-term CO<sub>2</sub> for proving of geological sequestration options

# Federal Policies to Advance FT Fuels

- Extension of existing 50 cents/gal excise tax credit
- Purchasing mandates similar to those for ethanol and other biofuels
- Extension of DoD contracting authority to allow 15-20 years supply contracts
- Loan guarantees
- Price collars

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