Forward Looking Statements

This presentation includes forward-looking statements as well as historical information. These forward-looking statements may include statements relating to the Syntroleum Process and related technologies, liquefied natural gas development, the GTL Barge and other gas-to-liquids plants based on the Syntroleum Process, anticipated costs to design, construct and operate these plants, anticipated costs to make products from these plants, the timing of commencement and completion of the design and construction of these plants, obtaining required financing for these plants, the economic construction and operation of gas-to-liquids plants, the value and markets for plant products, testing, certification, characteristics and use of plant products, the continued development of the Syntroleum Process (alone or with partners), anticipated capital expenditures, anticipated revenues and any other statements regarding future growth, cash needs, operations, business plans and financial results. When used in this presentation, the words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “project,” “should” and similar expressions are intended to be among the statements that identify forward-looking statements. Although we believe that expectations reflected in these forward-looking statements are reasonable, these kinds of statements involve risks and uncertainties. Actual results may not be consistent with these forward-looking statements. For discussion of these risks and uncertainties we refer you to the risks described under “Risk Factors” in our Annual Report on Form 10-K.
A Technology Leader in Fischer-Tropsch GTL
Syntroleum Commercializing Gas-to-Liquids and Coal-to-Liquids

- Syntroleum is a US Public Company with headquarters in Tulsa, Oklahoma
  - Listed on NASDQ: SYNM
- 20+ years of comprehensive technology development
- 127 US and foreign patents pending and issued
- 125 Employees
- Operate only fully integrated FT fuels plant in North America
- Over $250 million invested in technology development
- Own and operate all facilities required for Fischer-Tropsch
  - Bench scale FT reactors over 1,000,000 hours runtime
  - Pilot plant demonstration with over 36,000 hours of runtime
  - Fully integrated demonstration plant
Syntroleum Clean Fuels, Easily Sold
Produced from Natural Gas or Coal

<table>
<thead>
<tr>
<th>Property</th>
<th>Current ASTM D975 Diesel</th>
<th>October 2006 EPA Diesel</th>
<th>Current E.U.-EN590 Diesel</th>
<th>Syntroleum FT Diesel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfur (PPM)</td>
<td>500</td>
<td>15</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>Aromatics (%)</td>
<td>35</td>
<td>35</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Cetane Number</td>
<td>40</td>
<td>40</td>
<td>51</td>
<td>74+</td>
</tr>
</tbody>
</table>

- Performs better than conventional diesel
- Valuable blending stock to meet new guidelines with lower emissions
- Compatible with existing engines and infrastructure (pipelines, storage terminals, pumps)
- Non-toxic and Bio-degradable
- Producible from many raw materials
  - Natural Gas
  - Coal/Petroleum Coke
  - Biomass / Land Fill Waste
- CARB – CEC: A 1/3 blend of F-T with 2/3 conventional diesel has net positive benefit to society
Percentage Reduction of Engine Emissions for FT Fuels Relative to Conventional Diesel

From a 5.9 liter Cummins B
Catoosa Plant Demonstrates All Three GTL Process Technologies

- It has a 70 bpd designed capacity, can produce as much as 100 bpd.
- It is a fully integrated operation, with all the 3 steps in GTL: Syngas, F-T, and Product Upgrading
- All the facilities / equipment are commercially scalable sizes
- Commercial catalyst with regeneration, wax separation, full heat transfer internals in FT reactors are applied
- In addition to the purpose of technology demonstration, the Plant will train operators for commercial plants
Syntroleum GTL Technology: Focusing on Modular Plants

- For GTL, the Syntroleum process has the advantage of using compressed air instead of pure O2, our commercial development the three types of Modular GTL Plants as shown below.

- Synm recently made an announcement in forming a JV with Bluewater to build the first FPSO with GTL on board:
  - 40,000 bpd oil;
  - 20,000 bpd GTL

- Bluewater is largest builder and operator of FPSO in the world. Synm’s newly designed GTL train size is 20,000 bpd.
Commercializing CTL
Syntroleum Leveraging GTL Knowledge to Pursue CTL Opportunities

- We have the only operating GTL plant in U.S. delivering ultra-clean fuels
- We are conducting a demonstration program using our cobalt FT catalyst for conversion of coal-derived syngas
- We are moving forward with common FT reactor designs for both GTL and CTL applications
- Initiating detailed feasibility studies with multiple “greenfield” CTL projects
Syntroleum FT Reactor is Indifferent to Source of Syngas (GTL or CTL)
Coal to Liquids Process Flow Diagram

**Gasification Process**
- **Gasifier**
- **Quench**
- **Shift**
- **Conversion**
- **Clean Up**
- **Guard Beds**
- **Fischer-Tropsch Reactors**

**Fischer-Tropsch Process**
- **Synthesis Gas (SynGas)**
- **PSA**
- **H₂**
- **H₂O**
- **Tail Gas**

**Chemical Process**
- **Gasification**: \(2\text{CH}_1 + \text{O}_2 = 2\text{CO} + \text{H}_2\)
- **Water Gas Shift**: \(\text{CO} + \text{H}_2\text{O} = \text{CO}_2 + \text{H}_2\)
- **FT Synthesis**: \(\text{CO} + 2\text{H}_2 = \text{CH}_2 + \text{H}_2\text{O}\)
- **FT Synthesis**: \(\text{CH}_2 + \text{C} \text{H}_2... +\text{H}_2 = \text{C}_n\text{H}_{2n+2}\)
- **Refining**: \(\text{C}_n\text{H}_{2n+2} + \text{H}_2 = \text{C}_r\text{H}_{2r+2} + \text{C}_{n-r}\text{H}_2(n-r)+2\)
FT Product Yield from Different Coal Types

Dilute Coals Produce Fewer FT Barrels Per Ton

About 3.4 metric tonnes of daf coal for 1.0 mt of FT liquid

FT barrels per ton

HIGH VOLATILE BITUMINOUS

PETCOKE

LIGNITE

0% - “MAF” (Moisture and Ash Free)

50% M+A
Capital Cost Break-Down for CTL*

* Typical US-Based Plant
CTL Plant Economic Parameters

- Single train size CTL plant is 20,000 barrels/day

- Capital and operating cost is highly dependent upon
  - Feedstock characteristics
  - Size and location of CTL plant
  - Source of labor, materials and equipment
  - Availability of adjacent infrastructure and transportation systems

- With good coal resources being available, CTL projects are typically economically attractive when crude oil prices are above $35 - 40 per barrel

- Detailed studies are advisable to support investment decision-making
  - Feedstock testing and characterization
  - Engineering pre-FEED design and cost estimating
  - Product market studies
Coal to Liquids Business Strategy
It is the Energy Fundamentals that are Driving CTL Opportunity

• Fundamental balance in supply and demand of oil has shifted and it is less likely that price of oil and gas would go back to very low levels.

• There is clearly a increasing world-wide demand for clean transportation fuels, particularly ultra low-sulfur diesel

• There are abundant underdeveloped coal reserves in US, China & Australia.
  – Converting 5% of US coal reserves equals current US oil reserves without drilling a well or building a refinery.
  – In the case of China, the figure is about 7%.

• Projects in US are driven by government-mandated clean fuels and desire for energy security from domestic supplies

• For China, capacity, security and diversification of oil supply are certainly issues for the government and the energy sector.
Coal-to-Liquids Potential

World Wide Coal Reserves

United States
Russia
China
India
Australia
Germany
South Africa

Source: Energy Information Administration International Energy Annual 2003
Sustec-Syntroleum CTL Joint Venture
Announced June 5, 2006

• Sustec-Syntroleum Alliance strategy is to participate / invest in CTL, not just act as tech providers.
• We are currently
  – Sponsoring CTL projects
  – Forming partnerships with coal owners, utility companies, product off-takers, technology providers
  – Focusing on U.S., China and Australia for greenfield projects
  – Evaluating opportunities to “plug and play” CTL modular units into existing facilities to fast-track commercial development
  – IGCC Power Plant + CTL
  – Polygeneration with gasification “island” enables “product switching” to respond to market supply-demand changes
• Our objective is to participate in the whole chain of CTL process, from ownership of coal resource, mining, CTL conversion, and marketing to downstream assets, e.g., specialty chemicals.
Spreetal CTL Plant
Schwarze Pumpe Complex, Germany
First Syntroleum Commercial FT Plant
Spreetala CTL Project

• Syntroleum and Sustec have entered into 50-50 agreement to jointly develop a 3,000 bpd FT plant – Spreetala Project
• Project is expected to be the first commercial Syntroleum Fischer Tropsch plant.
• This is phase one of a planned 20,000 bpd FT installation at the Schwarze Pumpe Complex in Germany
• Spreetala is the first project under the Sustec-Syntroleum JV announced earlier this year
• The pre-FEED engineering work is to be commenced by mid-summer
• Final investment decision is expected by first quarter 2007
Spreetala CTL Project Location
Schwarze Pumpe Industrial Area
Spreetal CTL Project

- Sustec owns and operates existing gasification plant
- Current gasification fueled by lignite, coal tars, municipal wastes, biomass
- Currently operating
  - Methanol plant (with Rectisol unit)
  - 75 MW Power Plant
- 3,000 b/d Syntroleum FT unit proposed to be added to existing gasification plant
- Expansion to 20,000 bpd expected
Spreetal CTL Project

- Plant will be integrated with Sustec gasification plant
- The Fischer Tropsch unit will be a slurry reactor utilizing cobalt catalyst
- Existing Rectisol process and carbon adsorption units will be used for syngas clean-up
- Syngas will be produced from lignite coal, biomass and municipal waste which will demonstrate the flexibility of the Sustec gasification and the Syntroleum cobalt based FT process
Spreetal CTL Project
Key Economic Advantages

• Located in existing major industrial complex
  – Existing industrial infrastructure = lower overall capex

• Gasification plant and Rectisol process in place and operating
  – Shorter time to commercial operation
  – Lower CTL capex requirements

• Plant located in premium value product market
  – Large diesel market requiring clean fuel
  – Strong diesel and naphtha markets

• Pre-qualified for major German government cash grant
  – Long standing industrial finance program (began in 1999)
Additional Similar CTL Opportunities

- Syntroleum experience in refining and electric power industry is revealing additional project opportunities similar to Spreetal
- Detailed analysis of other existing facilities is underway to confirm merits of combining FT with currently operating and planned gasification plants
- Discussions with asset owners for similar JV’s are occurring
- Syntroleum expects to be able to replicate this success
Summary - Sustec-Syntroleum CTL
...the clear choice now

- Market changes providing multiple economic opportunities
  - High oil prices, with availability of relatively low-cost coal
  - Increasing demand for clean fuels world-side
  - Government incentives available to increase alternative energy supplies

- Syntroleum CTL technology path is parallel and supplemental to Syntroleum GTL
  - Syntroleum FT reactor for CTL are basically the same as for GTL

- Sustec GSP coal gasification Technology has competitive advantages

- Sustec and Syntroleum are integrating technologies to offer competitive low-cost solution
  - Flexible commercial arrangements
  - Seeking to be full partner in project development