



ASX Announcement
3rd August 2010

SYNGAS LIMITED
("Syngas" or "the Company")

Further engineering work advances Coal-to-Liquid Project.

The Clinton Project makes significant progress.

Highlights:

- **Further engineering design completed for three sections of the plant:**
 - Gas Clean up,
 - Gas to Liquid Synthesis, and
 - Liquid Upgrading
- **Building on past Siemens Gasification work.**
- **Work delivered by proven technology providers - UOP LLC, and Rentech Inc.**
- **Post Pre-Feasibility enhanced detail and greater level of confidence in project.**
- **Updated daily liquid fuel production rate of 14,600 barrels.**
- **Advances Basis of Design phase of Bankable Feasibility Study.**
- **Overall integrated Process Flowsheet Modelling well underway.**
- **Now updating overall plant capital and operating cost estimates.**
- **Revising Project financial model incorporating updated capital and operating costs and revenue projections.**

Introduction

The Board of Directors of Syngas Limited (ASX: SYS) is pleased to announce the completion of further preliminary engineering design work on the Company's Clinton Project. The work was completed by UOP LLC, a Honeywell company, and Rentech Inc. (NYSE AMEX: RTK).

The Clinton Project centers around the use of proven, above-ground technologies to produce ultra-clean diesel fuel using local conventionally mined lignite/coal.

Completion of this latest work, over three of the six key sections of the plant, has provided a solid basis for Syngas to progress integrated overall process flowsheet modelling, updated capital and operating cost assessments and updated project financial modelling.

Background

This latest engineering work on Gas Clean up, Gas to Liquid Synthesis, and Liquid Upgrading was commissioned and announced to the market in November 2009 and January 2010.

The work was based on the outcomes of the Feasibility Engineering Study completed by Siemens Fuel Gasification Technology GmbH & Co. KG (Siemens) in August 2009. This evaluated synthesis gas (Syngas) production from a sample of Clinton coal extracted during Syngas' 2008 drilling program. The Clinton Project Pre-Feasibility Study (PFS) was completed in April 2009.

Syngas is currently conducting the Bankable Feasibility Study (BFS) for the development of the Clinton Project, the site for which is located approximately 120 km north west of Adelaide in South Australia.

The Clinton Project is a large scale, long life, liquid fuel production project. It will use proven, above ground Coal-to-Liquid technologies to produce predominantly ultra-clean diesel.

Syngas is also developing biomass to energy projects utilising proven gasification technologies.

Outcomes

Based on the work now completed, daily production levels of around 14,600 barrels of liquid fuel have been estimated for the Clinton Project.

The latest energy and mass balance analysis, along with the previously completed gasification engineering work, has allowed plant power and oxygen demand to be modelled to a greater level of confidence than for the PFS.

Syngas' strategy of process self sufficiency in terms of water and electrical power remains achievable. Peaking power sales of up to 33 MW, to enhance overall project revenues are being investigated in more detail.

With this additional information, Syngas is now re-evaluating capacity specifications around both gasifiers and turbines. Reconfiguration and optimisation work on selected process elements will take place to improve gas to liquids yields.

Estimates of the level of capital equipment required across the plant have been greatly enhanced as a result of this latest work, as well as the work previously completed by Siemens.

Syngas' in-house engineers and specialists consulting team are continuing to evaluate the engineering results provided by UOP and Rentech.

Revised capital and operating cost estimates across the entire Clinton Project plant are now underway, in conjunction with revised project financial modelling incorporating up to date liquid fuel price projections.

This work has provided a solid basis for more detailed engineering, including environmental assessments as part of the BFS, to take place.

As expected matters have been highlighted which will be dealt with in the next stage of work on the Project.

Summary of Work Completed

Since completion of the Clinton PFS four primary sections of the overall process have now undergone more detailed engineering as part of the Basis of Design phase of the Clinton BFS.

Table 1. Preliminary Engineering work as part of the BFS Basis of Design.

	Primary Section (within the overall process)	Work Completed	By	When
1	Coal Gasification	Feasibility Engineering Study	Siemens	August 2009
2.	Gas Clean up	Preliminary Engineering	UOP	July 2010
3	Gas Synthesis	Preliminary Engineering	Rentech	July 2010
4	Liquids Upgrade	Preliminary Engineering	UOP	July 2010
5	Coal Preparation		Confidentiality Agreement	Planning is underway
6	Coal Mining		Pending	Work on lower mining cost options is being scoped.

Secondary Sections of the plant which support these Primary Sections are:

- Oxygen Production,
- Water Treatment,
- Electrical Power generation and
- Sulphur production.

Clinton Project coal gasification section parameters (i.e. block diagrams, mass flows and syngas composition) as determined by the Siemens Feasibility Engineering work in 2009 provided key inputs into the work that has been completed by UOP and Rentech. The preliminary engineering outputs that have been delivered to Syngas are listed in Table 2.

Table 2. Engineering Outputs

	Plant Section	Results provided
UOP	Gas Clean up	<ul style="list-style-type: none"> • Design process summaries, • Process Flow Diagrams (PFD's) • Heat and Material balances, • Process Descriptions, • Equipment lists, • Typical plot plans, and • A range of other engineering works outcomes.
Rentech	Gas to Liquid Synthesis	<ul style="list-style-type: none"> • Heat and Material Balance (HMB), • Battery limit stream data, • Utility requirements, • Block Flow Diagram, • Preliminary Plot Requirements, and • Capital and Cost Estimates.
UOP	Liquids Upgrading	<ul style="list-style-type: none"> • Hydroprocessing, • Cracking, and • Fractionation.

Looking Forward

Syngas has now commenced work on the following:

i. Completion of Overall Process Flowsheet Modelling work

An overall process flowsheet incorporating all mass flows between each of the sections of the plant is being developed. It will incorporate all of the engineering work which has been completed to date. It will provide the basis for further detailed engineering work to be scoped and undertaken as well as a basis for further more detailed capital and operating cost assessments and updated financial modelling.

ii. Development of a Project plot plan

This is a masterplan for the total project and reflects the integrated flowsheet in a scaled physical form including, for example, elevation drawings.

iii. Further Coal Mining Studies

The coal will be surface mined using conventional opencut mining methods. Syngas will continue with exploration to determine additional resources and to subsequently move these resources to reserve status, based on all relevant approvals being received. Further mine design work is planned including dewatering method selection and mining method reviews, in particular incorporating the use of more continuous mining equipment.

iv. Coal Feed Preparation

Work will proceed with bulk sample collection for testing so as to better determine the comminution (size reduction) and drying properties of the Clinton coal.

v. Further Gasification testwork

A bulk sample of coal is to be collected using large diameter drilling, subject to all relevant approvals being received, and sent to Germany for continuous gasification testing in 2011.

vi. Oxygen Production/Plant

The gasification process consumes oxygen which is produced in cryogenic air separation units. Relationships are being built with suitable technology providers with proven capabilities in this area.

vii. Water Treatment

The process will be self sufficient in its water requirements. Water extracted from the feed coal during the preparation and drying process will be recovered and reused in the overall production process. Water generated in other parts of the process will also be reused.

However the water will require purification and more detailed investigations into the reverse osmosis unit for the Clinton plant will now proceed.

viii. Electrical Power Generation

The process will produce surplus steam and waste (tail) gas which has the potential to be used to generate electricity for supply into the grid at peak demand times.

Syngas will continue to work with its strategic partners to model potential optimal revenue streams as well as associated grid connection capital requirements.

ix. Sulphur production

The Selexol process, part of the overall plant process, removes Hydrogen Sulphide from the raw Syngas which can then be processed to produce sulphur for sale. Syngas will now proceed to identify a suitable technology partner for sulphur production for the Clinton project. Sale of sulphur produced from Clinton is covered under an exclusive option offtake agreement signed with a wholly owned MetalsX Limited subsidiary in 2008 relating to the supply of sulphur for the Wingellina Project.

x. Regulatory Approvals including Environmental Assessment work

Syngas is working with a number of regulatory bodies in relation to the Clinton Project approvals. A number of environmental baseline studies have been identified and are being scoped for implementation.

Summary

The completion of this Preliminary Engineering work by UOP and Rentech advances the Basis of Design phase of the Clinton Project Bankable Feasibility Study.

It is another positive step forward for the Project.

This work, along with previous engineering work completed by Siemens, has provided a solid basis for overall integrated process flowsheet modelling, updated capital and operating cost assessments and updated project financial modelling to take place.

As expected several matters highlighted will be dealt with in the next stage of work on the Project.

Syngas looks forward to providing additional information in due course.

Ends

About Syngas Limited

Syngas Limited (www.syngas.com.au), incorporating the Clinton Project following the acquisition of Syngas Energy Limited in January 2008, is an ASX listed oil and gas business with, as a core project, a liquid transportation fuel production project located in South Australia which is at Bankable Feasibility Study stage of development. One of Syngas' granted mineral exploration licences covers an area of 288 km² north-west of Adelaide, over known coal deposits within the Clinton Coal Measures, located in the Northern St Vincent Basin Coalfields, north of the Gulf of St Vincent. Syngas also holds a granted mineral exploration licence over a 143 km² area, south-east of Adelaide, covering the known coal deposit of Moorlands.

In September 2009 Syngas entered into a Joint Venture with Resolve Geo Pty Ltd over two mineral exploration licences covering a total area of 79km² within the Gippsland Basin, a producing coal area, in Victoria, and potential further project area for Syngas.

In January 2010 Syngas announced that a viability review over a 100% non-food biomass fed ultra-clean diesel production facility, modelled on Rentech Inc's (NYSE AMEX: RTK) Rialto Project in California, USA, would take place over the next 12 months. This viability review will leverage off the potential excess residual straw from cropping biomass supplies in the Clinton Project area and Syngas' growing gasification expertise base.

For further information contact:

Merrill Gray
Managing Director
Syngas Limited
B.Sc, B.Min.Tech, M.B.A., MAusIMM, MAIE, AFAIM
Phone: (08) 8232 8455
Email: enquiries@syngas.com.au

**Syngas ... fuelling a cleaner, more secure transportation
future**

