



**COALWORKS Limited**



## **COALWORKS AND SYNTHESIS ENERGY SYSTEMS ANNOUNCE STRATEGIC ALLIANCE TO DEVELOP OAKLANDS “SYNTHETIC GASOLINE” PLANT**

**SYDNEY, Australia and HOUSTON, Texas, December 2, 2009** - Coalworks Limited (ASX:CWK), an emerging Australian energy developer, and Synthesis Energy Systems Inc. (“SES”) (NASDAQ:SYMX), a global industrial gasification company, intend to develop, through a strategic alliance, Coalworks’ first coal gasification and liquefaction plant at Oaklands in New South Wales, Australia utilizing SES’ proprietary U-GAS<sup>®</sup> gasification technology, which SES licenses from the Gas Technology Institute.

Coalworks and SES have entered into a strategic alliance agreement which is based on the following key points:

- U-GAS<sup>®</sup> technology has been proven on a commercial scale with gasification plants in China
- The U-GAS<sup>®</sup> technology is ideal for sub bituminous coal like that is found in Oaklands
- The Oaklands coal resource is well suited for gasification and downstream value added products
- Oaklands coal would be converted to gasoline via a planned coal to liquids (CTL) plant
- The agreement provides a framework for feasibility and engineering design phases using commercially proven technologies and plant construction strategies

SES’ 95%-owned Hai Hua joint venture project in Shandong Province, China is its first commercial scale coal gasification plant and has been in operation since January 2008 producing syngas from high ash coal. SES sells its syngas to a nearby customer which converts this syngas into methanol. Methanol can also be synthesised into synthetic gasoline and other chemicals. SES’ second plant is under construction in Henan Province, China and the company has other projects under development in China and is developing licensing opportunities in the United States, India, Australia and other markets.

Pursuant to the strategic alliance agreement, Coalworks has engaged SES to conduct a feasibility study for the CTL plant. Pending successful results from the feasibility study, Coalworks would enter into a license agreement with SES for the U-GAS<sup>®</sup> technology at the Oaklands site. The study also envisages Coalworks licensing commercially proven methanol to gasoline technology. SES would also provide expertise, designs, plans and cost reduction techniques such as modularization to assist Coalworks with the construction and operation of the plant.

The Oaklands coal resource will be converted into high value gasoline product through the integration of these commercially proven technologies. In the CTL plant coal is converted

into syngas through the U-GAS® clean coal gasification process. The syngas is then converted into methanol and the methanol is synthesized into an ultra-low sulphur gasoline product. This U-GAS® process minimizes the traditional pollutants found in coal combustion and the facility will be designed as “Carbon Capture” ready.

“Our U-GAS® technology is uniquely well suited for the clean and efficient gasification of low-rank coals, like from the Oakland Basin as well as other low rank coals in Australia. This strategic alliance between SES and Coalworks is an important step forward as we grow our technology licensing business outside of China,” said Donald Bunnell, President and CEO of Synthesis Energy Systems – Asia Pacific. “We are looking forward to working with Coalworks as they develop their first CTL plant based on our U-GAS® technology and our experience with CTL. Coalwork’s sub-bituminous coal appears to have excellent gasification potential and there is an excellent synergy between our two companies,” Bunnell added.

The feasibility study contemplated under the Coalworks-SES agreement will further define a plant to process coal mined at Oaklands into gasoline which will be sold into Australia’s commercial gasoline market. Coalworks owns 100 percent of the Oaklands Coal Project and is currently undertaking a separate feasibility study to determine the viability of constructing and commissioning a coal mine on the site.

Commenting on the strategic alliance, Coalworks Managing Director and CEO, Andrew Firek said “The experience SES has acquired through developing two commercial scale coal gasification plants in China, as well as its other development activities, will be invaluable to Coalworks”.

“We believe that forming a strategic alliance with SES will be a milestone event for Coalworks. The agreement which would allow Coalworks an exclusive licence for the U-GAS® technology in the Oaklands Basin will also provide a framework for Coalworks to proceed with SES’s assistance through the engineering design phases utilizing state of the art plant construction and operation strategies to achieve reduced capital expenditures and key performance indicators,” said Mr. Firek.

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## **About COALWORKS**

Coalworks has a portfolio of projects in Australia including Oaklands (JORC measured, indicated and inferred 822mt\* thermal coal; Bankable Feasibility Study underway), Vickery South (exploration target coking/thermal coal), Hodgson Vale (exploration target thermal coal) and Ashford (limestone deposit with high value lime products as the target). \*See Coalworks’ ASX announcement 5 November 2009

## **About Synthesis Energy Systems, Inc.**

SES is an energy and technology company that builds, owns and operates coal gasification plants that utilize its proprietary U-GAS® fluidized bed gasification technology to convert low rank coal and coal wastes into higher value energy products, such as transportation fuel and ammonia. The U-GAS® technology, which SES licenses from the Gas Technology Institute, gasifies coal without many of the harmful emissions normally associated with coal combustion plants. The primary advantages of U-GAS® relative to other gasification technologies are (a) greater fuel flexibility provided by ability to use all ranks of coal (including low rank, high ash and high moisture coals, which are significantly cheaper than higher grade coals), coal and biomass waste products; and (b)

ability to operate efficiently on a smaller scale, which enables us to construct plants more quickly, at a lower capital cost, and, in many cases, in closer proximity to coal sources. SES currently has offices in Houston, Texas and Shanghai, China. For more information on SES, visit <http://www.synthesisenergy.com>.

### Forward Looking Statements

This press release includes “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements, other than statements of historical facts, included in this press release that address activities, events or developments that SES expects or anticipates will or may occur in the future, including such things as business strategy and measures to implement strategy, competitive strength, goals, expansion and growth of the business and operations, plant expansion and growth of the quantity of methanol production, references to future success, reference to intentions as to future matters and other such matters are forward-looking statements. These statements are based on certain assumptions and analyses made by SES in light of its experience and its perception of historical trends, current conditions and expected future developments as well as other factors it believes are appropriate in the circumstances. Forward-looking statements are subject to certain risks, trends and uncertainties that could cause actual results to differ materially from those projected. Among those risks, trends and uncertainties are its early stage of development, its estimate of the sufficiency of existing capital sources, its ability to raise additional capital to fund cash requirements for future operations, its ability to reduce operating costs, the limited history and viability of its technology, the impact of regulatory changes in China and elsewhere on our business, the effect of the current international financial crisis on its business, commodity prices and the availability and terms of financing opportunities, its results of operations in foreign countries and its ability to diversify, its ability to maintain production from its first plant in the Hai Hua joint venture project, approvals and permits for its Yima project and other future projects, the estimated timetables for achieving mechanical completion and commencing commercial operations for the Yima project and development of its licensing business. Although SES believes that in making such forward-looking statements its expectations are based upon reasonable assumptions, such statements may be influenced by factors that could cause actual outcomes and results to be materially different from those projected. SES cannot assure you that the assumptions upon which these statements are based will prove to have been correct. SES has no intention, and disclaim any obligation, to update or revise any forward-looking statements, whether as a result of new information, future results or otherwise.

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To view the time-lapsed video of Hai Hua construction, please click [www.synthesisenergy.com/haihua](http://www.synthesisenergy.com/haihua)

