

## Metex, CSIRO In Coal Gasification Bid

Gold company Metex Resources Limited has joined with CSIRO in the development of an innovative process for the gasification of underground coal deposits for power generation and liquid fuels – commencing with a landmark trial in Queensland's Surat Basin.

Metex Managing Director, Ian Walker, said power generation is expected to be achieved at a comparable cost to conventional coal-fired stations but with significant reductions in accompanying greenhouse emissions.

"The agreement with the CSIRO represents a significant diversification and growth opportunity for Metex, with the new energy initiative to be pursued alongside the company's existing gold exploration and development assets in the Laverton region of Western Australia", Walker said.

Metex will acquire a 50% interest in a new joint venture company, Coal Gas Corporation Pty Ltd (CGC), by subscribing \$2.5 million in equity capital over a 12 month period. The CSIRO has been granted its 50% equity interest for assigning its rights, title and interests associated with the Underground Coal Gasification (UCG) Technology, as well as various related licences, to CGC.

Walker said underground coal gasification has been trialed and is operating in parts of the former Soviet Union for over 40 years, and trials have also been performed in China, the USA, western Europe and a number of other countries.

The technology involves drilling a range of wells and bores to gasify coal deposits in-situ to produce a gas suitable for low-cost power generation. The resultant gases are

harnessed at the surface for conversion into suitable feedstock for power generation, or for conversion into ultra-clean liquid fuels and chemicals.

CGC has also acquired three coal leases in the Surat Basin in southeast Queensland, covering an area of 2,375km<sup>2</sup>, which will be the focus of a proposed first stage of activity in identifying and developing a suitable underground coal deposit for demonstration and development of the UCG process.

**“The alternative energy sector is currently experiencing high levels of market interest because of soaring oil prices and strong levels of demand. Underground coal gasification is an innovative process which is suitable for deep underground coal deposits where current underground mining methods and inefficient extraction techniques would make mining uneconomic”**

These leases are located close to existing infrastructure and potential markets, being traversed by power transmission connectors, gas and oil pipelines, and power stations.

Walker said the initial trial would target coal seams at greater than 400 m depth, drawing on the extensive expertise within the CSIRO in developing and modelling controls of the UCG technology over the past 10 years through its Division of Exploration and Mining based in Queensland.

"This is an exciting opportunity for Metex to participate in a leading-edge energy initiative in partnership with Australia's premier scientific research and development agency, which has been negotiated over the past 12 months", Walker said.

"Our interest in CGC will be held through a newly incorporated subsidiary, Carbon Energy Pty Ltd. Initial funding will be sourced from our existing financial resources, with funding options for the next stage possibly including a potential IPO."

Walker said the CGC joint venture represented a significant addition to Metex's asset base, and would be pursued in conjunction with ongoing gold exploration and development programs at its Laverton Exploration Joint Venture and elsewhere in the Eastern Goldfields.

"The alternative energy sector is currently experiencing high levels of market interest because of soaring oil prices and strong levels of demand," he said. "UCG is an innovative process which is suitable for deep underground coal deposits where current underground mining methods and inefficient extraction techniques would make mining uneconomic."

"Electricity can be generated using the resultant gas at a comparable cost to conventional coal-fired power but with a 40-50% reduction in greenhouse emissions. With increasing global demand for oil, and rising coal and oil prices, the inexpensive syngas produced by UCG represents a very attractive alternative for power generation and the Gas to Liquids (GTL) field."

As part of the joint venture agreement, Dr Cliff Mallett, previously Acting Chief of the CSIRO Exploration & Mining Division – based in Queensland, has joined CGC as Executive General Manager to manage and implement the commercialisation of the UCG technology. ■