



# Arckaringa project set to augment supply in SA

A proposed US\$3.5 billion coal to liquids and power project in South Australia's Arckaringa Basin should provide long-term security of supply of transportation fuels to the state, according to project proponent, Altona Energy.

At a recent conference in the state, Altona executive director, Peter Fagiano, said the Arckaringa project - a joint venture with CNOOC-NEIA, a subsidiary of Chinese oil major CNOOC - could also augment existing grid electrical supply to meet the state's growing power demand.

"The project's planned diesel production meets the forecasts demand for South Australia up until at least 2030, easing the pressure on South Australia which currently relies on international imports and 'out of the state' supply of transportation fuels," said Mr Fagiano.

"As such, South Australia is subject to price volatility for its fuels due to fluctuating crude oil price, freight costs and foreign exchange rates and additionally has exposure to security of supply due to factors such as politics in the Middle East and North Africa."

Mr Fagiano said these factors could be avoided in respect of diesel fuel supply by the utilisation of Arckaringa coal based fuels.

"This provides 'homeland security of supply' and competitive supply - as the cost of production sits at around US\$53 per barrel of

diesel (33 cents a litre) based on current plant costings," he said.

"Today, international crude oil prices sit in excess of US\$110 per barrel to which you would normally add another \$15 to \$20 per barrel to allow for refining costs to produce diesel plus transport. OPEC is forecasting that crude oil prices will settle at between US\$80 to US\$90 per barrel.

"Based on these economics, the development of the Arckaringa project looks attractive both in the medium and long term."

Altona entered into a cooperation agreement in early May with US-based clean energy company Rentech, owner of proprietary technologies for the Fischer-Tropsch Process (FT Process) and the gasification of biomass to produce Synthesis Gas (Syngas).

The conditioned Syngas, when used with FT Process and upgrading technology, produces drop-in transportation fuels such as low sulphur diesel and aviation fuels.

Rentech's gasification technology can process biomass such as waste renewable organic materials, wood or wood bi-products, and municipal green wastes.

The agreement with Rentech includes working together to evaluate coal and also

biomass gasification projects for the application of Rentech's technologies in South Australia, where the Arckaringa Project is located.

Mr Fagiano said this was an exciting opportunity to further work with Rentech in evaluating the application of their technology.

"Rentech's technology is not only suitable for the Arckaringa CTL project but also for biomass derived Syngas for the production of renewable diesel where Rentech also has its own proprietary biomass gasifier.

"I have been associated with Rentech in the application of their FT Process technology since 2001.

"I welcome the opportunity to augment this relationship in evaluating the gasification of biomass in addition to the gasification of coal at Arckaringa and South Australia," Mr Fagiano said.

"Our agreement with Rentech reflects the increasing demand for the production of transportation fuels through the FT Process, utilising coal and biomass feedstocks," said Chris Lambert, Altona chairman.

Mr Lambert also highlighted the advantages of producing cleaner energy alternatives.

"Aviation fuels produced using Rentech's technology and carbon capture and sequestration, has a lower carbon footprint as well



as lower regulated emissions compared to traditional aviation fuel.

“The gasification of biomass presents an alternative method of disposing of waste and reducing the need for landfill solutions,” Mr Lambert said.

“The production of clean energy products from biomass, alongside those produced from the Arckaringa CT plant would further contribute to South Australia’s energy security.”

Altona’s project has coal reserves estimated at 7.8 billion tonnes of which 1.3 billion tonnes is JORC compliant.

The project has a proposed annual throughput of 10 million tonnes of coal to produce 10 million barrels of diesel/naptha products while exporting 4.5 million megawatts of electricity.

The coal to liquids and power plant components are estimated to cost US\$2,990 million with mine facilities adding a further US\$535 million to the cost.

Annual revenue is estimated at US\$1billion.



**Announcement:** Altona executive director Peter Fagiano.



**Agreed:** Fu Chengyu, president, CNOOC; Mr Xi Jinping, vice-president, the People’s Republic of China; Hon. Kevin Rudd MP then Prime Minister of Australia; and Chris Lambert, chairman, Altona Energy at the agreement signing.