



CarbonEnergy

ASX Announcement

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Carbon Energy signs first international development Agreement with Chile's Antofagasta Minerals

- Carbon Energy (CNX) has executed an Agreement with Antofagasta Minerals S.A ("Antofagasta") to jointly assess and develop a coal deposit in Mulpun, Chile using Carbon Energy's Underground Coal Gasification (UCG) technology.
- Carbon Energy will earn a 30% interest in the Mulpun coal deposit by applying its world leading UCG technology.
- Carbon Energy was selected by Antofagasta as their preferred joint venture partner on the strength of its superior technology, following the completion of a two year process by Antofagasta in which the capability of UCG companies from all over the world was rigorously assessed.
- Chile provides an ideal market opportunity for Carbon Energy due to the fact that energy demand is forecast to grow at 6-7 per cent over the next 5-10 years and there is an under supply of domestically sourced energy. Chile is highly exposed to increases in the already high price of imported supplies of diesel, natural gas, LNG and coal.

Agreement to establish a Joint Venture

Carbon Energy has signed its first international agreement with Antofagasta Minerals to develop a trial project in Mulpun Chile, utilising its UCG technology. Following feasibility studies, it is anticipated that both parties will enter into a Joint Venture to develop commercial projects based on UCG syngas.

Carbon Energy's Managing Director, Mr Andrew Dash, commented "This is a very significant day for Carbon Energy and we are especially pleased to be entering into our first international relationship with a company the size, strength and capability of Antofagasta Minerals, one of the world's biggest mining and exploration companies".

"The Agreement is consistent with our strategy to build a portfolio of coal resources throughout the world by leveraging off our core capability in UCG technology."

"In addition, Antofagasta shares Carbon Energy's ambition to provide low cost and reliable cleaner energy in an environmentally responsible and sustainable manner."

The Mulpun Coal Deposit

The Mulpun site is located in southern central Chile, 840 km south of Santiago and 40 km east of Valdivia, a city with a population of 150,000. Initial drilling and hydrological results provided by Antofagasta have indicated that it is suitable for UCG. As the deposit remains open to the North West, there is scope to find additional coal in this location, as well as within the other similar geological formations in the area.

Dr Cliff Mallett, Carbon Energy's Technical Director said, "A lot of the preliminary exploration work had been already undertaken by Antofagasta's energy team and the results to date are really positive. Additionally, their approach to the technical and environmental development of the site has been very comprehensive. We at Carbon Energy have been impressed with the commitment and the capability of the Antofagasta team and we look forward to getting the next stage of the project underway".

Once feasibility studies have been completed and a development plan approved by both parties, a Joint Venture will be established to begin work on the design, construction and operation of the trial project. Carbon Energy will fund 30% of the total costs of phase 2, estimated at \$4.5 million to be funded from existing sources. A successful trial will lead to the development of commercial projects based on UCG syngas.

Mr Dash noted that "Chile is an ideal market opportunity for Carbon Energy - energy demand is forecast to grow at 6-7 per cent over the next 5-10 years and there is a reliance on high priced imported diesel, natural gas, LNG and coal.

"As Carbon Energy is cost competitive in our home market in Queensland, where there are abundant supplies of coal and gas, we are confident that the joint venture will have no difficulty competing in Chile against imported energy sources. By way of example a 200 MW power station in QLD would generate approximately \$70 million p.a. In Chile, the same sized plant could generate between \$140 million to \$210 million p.a."

Project Structure for Joint Venture's Commercialisation of UCG

Under the Agreement both Carbon Energy and Antofagasta will commence work immediately to finalise a work plan, schedule and budget for an initial trial at the Mulpun location. This represents **phase one** of the project, which has been structured in four phases, with Carbon Energy's contribution being management time and travel costs. Antofagasta will conduct drilling and hydrological testing at its cost during this phase.

Once feasibility studies have been completed and the development plan approved by both parties, Carbon Energy will earn its 30% interest in the coal deposit and the Joint Venture will be established. The JV will then proceed to **phase two** which is focused on the design, construction and operation of the trial project. Carbon Energy will be required to fund 30% of the cost of this phase.

It is anticipated that the parties will commit to the trial project in the first quarter of 2010, subject to timing of government and other development approvals.

A successful trial will form the basis for large scale commercial projects in the area. **Phases three and four** are focused on the commercialisation stage including the undertaking of feasibility studies into a number of options followed by a development decision anticipated in calendar year 2011. An initial market study has already identified power generation opportunities. Both parties would be required to fund their pro rata share of any costs involved. Carbon Energy will also earn fees from the joint venture for the application of its UCG technology.



Andrew Dash
Managing Director

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About Carbon Energy

Carbon Energy's purpose is to produce clean energy and chemicals feedstock from Underground Coal Gasification (UCG) syngas.

Carbon Energy's unique approach to UCG and syngas production produces a low cost option for capturing CO₂ making it a leader in clean coal technology.

Carbon Energy's ambition is for syngas to become the preferred feedstock for producing clean coal power stations, an alternative to oil-based fuel, agribusiness products (fertilisers and explosives), polyolefin products (such as plastics) and allowing for economic carbon capture.

Carbon Energy's technological advantage comes from its association with CSIRO including world class geotechnical, hydrological and gasification modeling capabilities.

Carbon Energy is building an international portfolio of coal assets, suitable for UCG with close proximity to markets.

About Antofagasta Minerals S.A.

Antofagasta Minerals S.A. is a wholly owned subsidiary of Antofagasta plc, which is listed on the London Stock Exchange and is a constituent of the FTSE-100 index, with interests in mining, transport and water distribution. Its Chilean mining operations, which comprise Los Pelambres, El Tesoro and Michilla, produced 477,700 tonnes of copper in concentrate and cathode and 7,800 tonnes of molybdenum in concentrate in 2008. It is currently carrying out a brown-field expansion at Los Pelambres and developing the green-field Esperanza project in Chile, which, when operational, is expected to increase total Group copper production to nearly 700,000 tonnes per year by 2011. Antofagasta Minerals also has exploration or feasibility programmes in Latin America, Asia, Africa and Europe. It also has a joint venture with Empresa Nacional del Petroleo, the Chilean state-owned oil company, to explore and develop geothermal energy opportunities in Chile.

About the Energy Market in Chile

Chilean energy demand is forecast to grow at 6-7 per cent over the next 5-10 years but is faced with a continuing energy crisis due to its limited supply of domestically sourced energy together with a lack of natural gas from its neighbour Argentina. As a result Chile is making significant investment in renewable energy (hydro and wind), coal and LNG projects. Coal is Australia's largest export to Chile with demand expected to grow significantly over the next five years due to the increased energy demands in both the commercial and residential sectors.

Australian companies are already significant investors in Chile, and its relatively open business environment has made it an ideal base for Australian companies looking to expand into Latin America. There are approximately 120 Australian companies actively trading with Chile. More than half of the Australian or Australian affiliated companies with offices in Chile are related to the mining industry. ABS figures show that in 2008, total Australian investment in Chile was \$2 billion. Significant Australian private sector investors include BHP Billiton (mining) and Pacific Hydro (power generation).