

## **ASX RELEASE AND MEDIA RELEASE 23 APRIL 2012**

## GREENEARTH ENERGY CO<sub>2</sub> to FUEL CONVERSION TECHNOLOGY, AN ENVIRONMENTALLY FRIENDLY APPLICATION FOR VICTORIAN GOVERNMENT'S BROWN COAL EXPANSION PLANS

Greenearth Energy Limited (ASX:GER) believes its Israeli based joint venture project NewCO2Fuels Ltd and its laboratory proven CO<sub>2</sub> to Fuel conversion technology could provide opportunities for emissions reductions for domestic and international brown coal users.

Recently the Victorian Minister for Energy Michael O'Brien said the government will be undertaking a market assessment of interest in brown coal this year. "Previously we have not been able to use that resource as effectively as we would have liked because of the high emission content," Minister O'Brien told the media. "But every day there are new technologies being proposed, being developed to use brown coal in a lower emissions way." While this week Federal Resources and Energy Minister Martin Ferguson was in support of developing technologies to deliver cleaner brown coal outcomes for domestic use and export.

Greenearth Energy's Israeli joint venture company NewCO2Fuels Ltd headed by Professor Jacob Karni and his group based at the Weitzman Institute of Science have successfully developed the conversion technology in the laboratory. This concept involves a new method of using concentrated solar energy for the dissociation of carbon dioxide ( $CO_2$ ) to carbon monoxide ( $CO_2$ ) and oxygen ( $CO_2$ ). The same system can also dissociate water ( $CO_2$ ) to hydrogen ( $CO_2$ ) and oxygen ( $CO_2$ ), at the same time it dissociates the  $CO_2$ . The  $CO_2$  or the mixture of  $CO_2$  and  $CO_2$  called Syngas) can then be used as gaseous fuel (e.g. in power plants), or converted to liquid fuel (e.g. methanol), which has the potential to be stored, transported and used in motor vehicles.

Chairman of Greenearth Energy, Rob Annells said today; "We believe that our laboratory proven  $CO_2$  to Fuel conversion technology has the potential to allow the State of Victoria to further utilise its vast brown coal resources into the future by adopting this revolutionary new conversion technology when commercially proven.

"In addition by way of our worldwide research and license agreement with the Weitzman Institute of Science we have a potential opportunity to work with Victorian brown coal export partners to adopt our technology in their countries and utilise our States' brown coal reserves in a more environmentally friendly way.

"Our aim is to work collaboratively with Government and industry to ultimately produce energy in the most cost effective and environmentally friendly way possible. We hope to be able to deploy a modular technology pilot demonstration within the next 2 years".

For further information regarding Greenearth Energy's CO<sub>2</sub> to Fuel conversion technology please visit Greenearth Energy at www.greenearthenergy.com.au

Robert J. Annells

Chairman

Greenearth Energy Limited