

AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT

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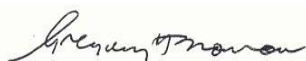
Nano-carbon/ Hydrogen Pyrolysis Project Update

Hythane Company, the US-based subsidiary of Eden Energy continues to make good progress on the on the pyrolysis project for producing carbon nanotubes and nanofibres (nano-carbon materials) and hydrogen from natural gas. Details of the progress are:

- The next scale-up of the pilot pyrolysis system has been designed and is currently being built in Denver, with the plan to be operational by August 2011.
- The pilot-scale catalyst production system is currently being updated with automated controls and other improved equipment for collecting the product, and the design and plans for a future scale-up of the catalyst production system to meet expected future carbon production requirements is nearing completion.
- Due to improvements, the yield of carbon product from the reactor has been increased by about 40% for a given loading of catalyst in the reactor, improving both the process economics and the quality of the product nano-carbon.
- The new pilot-scale system, if it works satisfactorily, should be capable of producing over 30 tonnes of carbon nanofibers per year together with 10 tonnes of hydrogen.
- The first commercial production system, which is scheduled to be operational before the end of 2011, will comprise multiple pilot-scale sized modules combined to form one integrated unit, which will be sized for a specific carbon production capacity or for a specific output of the “by-product” hydrogen.
- A typical Hythane[®] fueling station for a fleet of 50 buses in India may require approximately 100 Nm³/hr of hydrogen and, based on present projections, would use up to 8 of the pilot-scale pyrolysis modules, packaged as a single containerized system, producing 80 tonnes per year of hydrogen (equivalent to the fuel energy of over 280,000 litres of diesel fuel) plus 250 tonnes per year of either carbon nanotubes or nanofibres.
- After successfully demonstrating the system on Hythane[®] vehicle fueling station sized plants, longer term future scale-up plans, if each successive scale up proves successful, include pyrolysis systems sized for the production of the required nano-carbon for large cement plants and then potentially ranging up to the largest systems for

producing low-cost, low green house gas hydrogen for oil refineries and fertilizer plants. At this stage, Eden does not see any technical reason why such future scale-ups would not be successful, but this will require to be proven operationally.

- Further, as Eden's process generates (from providing the necessary heating for the reaction) only a small fraction of the typical CO₂ output compared with conventional industrial hydrogen production (using steam methane reformers) and instead produces solid, valuable carbon nanotubes or nanofibres, this is anticipated to become increasingly important for the commercial viability of these potential scale-ups, particularly with larger plants, as industries around the world start to factor in the cost of production of greenhouse gases as an unwanted by-product.



Gregory H Solomon

Executive Chairman

For further information please contact Greg Solomon (+61 8 9282 5889) or visit our website (www.edenenergy.com.au)