

AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT

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Perth company's carbon-based environmentally friendly concrete additive wins national contracting industry award

A carbon-based technology that is being developed to add super strength to concrete but with very little extra weight and which not only enables a reduction in the required quantity of concrete but which also consequentially reduces the environmental impact of concrete production has been recognised by the national civil contracting industry.

Perth-based and ASX-listed carbon and energy technologist, Eden Energy Ltd (ASX: "EDE") was last night awarded the Civil Contractors Federation's Environment Award at the industry's 2014 Earth Awards night in Adelaide, held on the eve of the CCF's two day national conference.

Eden defeated a field of six other finalists to win the honour, recognising the Company's success to date in developing and using carbon nanotubes to develop a much "greener" and superior performance concrete.

The additive is soon to go to commercial trials in both Australia and the United States over the next 12 months.

Eden's Executive Chairman, Mr Greg Solomon, said the global cement market was worth around US\$450 billion a year, or the equivalent of one tonne of concrete produced annually for every person on earth.

"The manufacture of such volumes of concrete, however, is responsible for producing around 5% of the world's total annual greenhouse gas emissions so our focus has been to use our emerging carbon nanotube production capability to enhance the strength of concrete. Positive laboratory trials to date indicate that a potential reduction of cement requirements of between 15-30% could be possible," Mr Solomon said.

"Not only is the result stronger, denser, tougher concrete but as less volume and potentially less steel reinforcing will be needed, this can flow on to reduced building costs, allowing greater design flexibility across the big concrete consumers in roads, bridges and high rise buildings," he said.

"The denser cement matrix in the concrete is also anticipated to make the concrete both less permeable and less susceptible to breakdown due to absorption of saline water, particularly in coastal and marine situations."

"Additionally, our early work with our carbon nanotubes added to plastic and polymer shows similar potential gains in strength."

Mr Solomon noted that the Awards came against a background of serious national debate about a loss of manufacturing skillsets and capabilities.

"Eden's journey to get to this point has taken almost a decade so the lesson to be understood by Australia is that the development of most new technologies takes time, and that persistence is

required to bring the level of reward that can again re-position Australia as a significant global technology innovator,” Mr Solomon said.

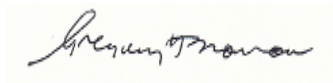
Initial US tests of carbon nanotube enriched mortar paste have resulted in an increase of 23.3% in compressive strength and a 13.6% increase in flexural strength after 28 days.

It is anticipated that this will enable both stronger lighter structures to be built using the strengthened concrete as well as producing significantly tougher surfaces for high wear surfaces such as on roads, bridges, car parks and warehouses.

The US field trials will initially target abrasion resistant applications such as the surfaces of roads and bridges that are exposed each American winter to heavy abrasion resulting from clearing snow with snow ploughs.

Mr Solomon said Eden was targeting having a commercial product within 12 to 24 months, again with an eye to the estimated annual US\$40 billion bill for maintenance of approximately 89,000 kilometres of concrete roads and bridges in that country.

Eden’s carbon nanotubes are produced using its proprietary pyrolysis process, developed in conjunction with University of Queensland, converting natural gas (methane) into carbon nanotubes and hydrogen, without directly producing CO2 as a by-product.



Gregory H. Solomon
Executive Chairman