



TO: COMPANY ANNOUNCEMENTS OFFICE

ASX LIMITED

DATE: 27th May 2010

MEDIA RELEASE

“Bio based plastics could replace over 90% of global consumption of polymers, if the price is right”- wme magazine article:

Please find attached an article by Waste Management and Environment (wme) in its April 2010 edition, titled **“PET PROJECTS’ “Bio based plastics could replace over 90% of global consumption of polymers, if the price is right”**.

The article makes reference to Cardia’s offering to this market and will be placed on Cardia’s website as well as being distributed to Cardia shareholder and Investor email list.

Pat Volpe

Chairman

ASX Code: CNN

Market Cap

Approx \$13.36M at 1.8 cents per share

Issued Capital

741,992,197 Ordinary Shares

Listed Options- CNNO

581,992,197 Options

Top 3 Shareholders

Polarity B Pty Ltd – 15.02%
Vermar Pty Ltd – 7.71%
Growthtech International – 4.50%

Directors

Patrick John Volpe
(Chairman)

Frank Peter Glatz
(Managing Director)

John Scheirs
(Non Executive Director)

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press clip

PET PROJECTS

Bio-based plastics could replace almost 90 per cent of global consumption of polymers, if the price is right. By Max Pichon.

PepsiCo, Nokia, IBM, Coca-Cola and KFC are but a taste of the companies dipping a toe into bio-based plastics, a booming area with global production capacity projected to increase from 360,000 tonnes in 2007 to about 2.3 million tonnes by 2013. That's annual growth of 37 per cent.

The upstream drivers are concern about dwindling petroleum reserves and growing carbon pollution; downstream it is about the rising tide of non-degradable plastic waste going to landfills and polluting oceans. IBM says, globally, 13 billion plastic bottles are dumped in landfill a year; in the US up to 28.5 kg of plastic packaging per person is binned annually.

Bio-based polymers come mostly from sugar and food waste and are biodegradable and compostable, in some cases breaking down in just 90-180 days. Melbourne company Cardia Bioplastics produces everything from plastic bags to flexible packaging to a new multilayer film for food contact that's made from 66 per cent corn starch.

The potential is evident. A study by the European Bioplastics Association and the European Polysaccharide Network of Excellence (EPNOE) found up to 90 per cent of the current global consumption of polymers could technically be converted from oil and gas to renewable raw materials.

Indeed, Cardia is investing millions of dollars in a new manufacturing site in China that will almost double capacity to as much as 15 million tonnes a year.

That doesn't make bioplastics a done deal though. EPNOE chairman Patrick Navard last year cautioned they would not be a large-scale substitute for oil-based polymers any time soon, given volatile oil prices and very high production costs. Then there's the infrastructure barrier.

"There is still much to do in terms of getting every household in Australia to get on the bioplastics bandwagon," said Alan Adams of the Australian Bioplastics Association (ABA).

Overseas there are incentives such as rebate systems in Holland and tax systems in Germany, but Adams doesn't expect regulation here in the short term, much as he'd like to see a "nationwide program for bioplastics at the commercial and household level".

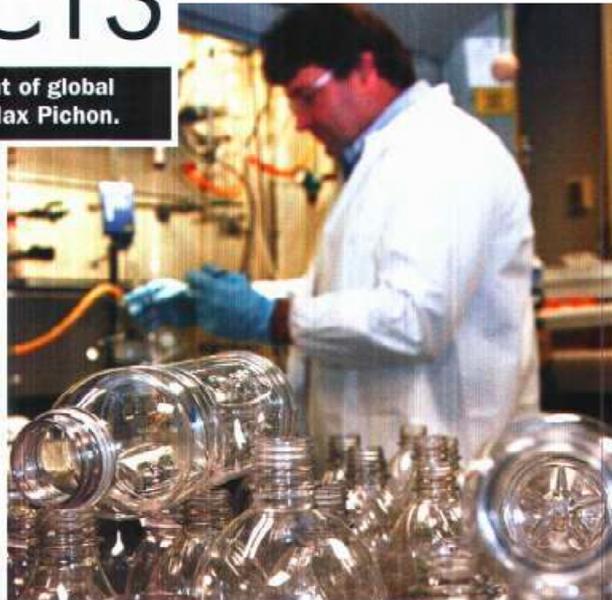
SEEDLING LOGO A BUDDING IDEA

One of the key goals of the Australian Bioplastics Association is to bring clarity to a market plagued by greenwash and riddled with confused consumers and councils.

Last year it launched the seedling logo throughout Australia and New Zealand to help consumers recognise certified compostable packaging and understand what it means.

To be certified compostable and carry the logo, biopolymer materials must undergo a stringent test regime to major global standards, carried out by independent accredited laboratories.

"I think our program of certification is there to provide an independent view of performance against known standards," said ABA president Alan Adams.



IBM research Jim Hedrick works on new formulas to recycle plastic bottles

"The solution has been to self-regulate. The Packaging Stewardship Forum (PSF) believes more in self-regulation and I totally agree with that," he said, noting the launch last year of a logo to help consumers identify compliant materials (see box).

Plastic breakdown

While interest in bioplastics is reasonably well established, news emerged last month of a different tack on sustainable plastics. Researchers at IBM and Stanford University, seeking to develop new polymers for microelectronics, made a breakthrough that could allow plastics to be continuously recycled or designed for full biodegradability.

"The presence of metal catalysts in plastics means that they often can only be recycled once before ending up in a landfill," said Chandrasekhar Narayan, who leads IBM's science and technology team at the Almaden Research Centre.

But two pass plastic may soon be a historical relic after Narayan's team found an organic option to replace 'immortal' metal oxide catalysts. The new families of organic catalysts die after facilitating the manufacturing process, eliminating a primary barrier to recycling.

IBM is already collaborating with scientists from King Abdulaziz City for Science and Technology (KACST) to develop the recycling process for PET plastics.

It is not just about recyclability though. Narayan said they have developed a whole new "path to polymer architectures that are quite different and that have properties plastics currently don't have".

The organocatalysts are broadly applicable to a diverse range of polymerisation techniques and monomer types. IBM expects to have a pilot project producing plastic within two years.

"I think it's going to revolutionise synthetic chemistry," said Narayan.

WME