



ACN 064 755 237

**TO: COMPANY ANNOUNCEMENTS OFFICE
ASX LIMITED**

DATE: 12 May 2009

BIOGRADE LIMITED PRESENTS AT CARBON ECONOMY CONFERENCE, SYDNEY 2009

The Board of Cardia Technologies Limited advises that its wholly-owned subsidiary, Biograde Limited ("Biograde"), has accepted an invitation to present a paper at the Carbon Economy Conference to be held in Sydney on 12 May 2009.

Biograde Managing Director Dr Frank Glatz will present a case study titled "*New Materials*", which will discuss the benefits and applications of sustainable packaging materials, such as the hybrid resins and internationally certified compostable resins developed and manufactured by Biograde. Dr Glatz will also discuss what types of businesses are investing in these products to improve their sustainability performance and to reduce their carbon footprint.

A copy of Dr Glatz's Carbon Economy Conference presentation document is attached.

Pat Volpe
Chairman

About Biograde:

Biograde Limited is a fully owned subsidiary of Cardia Technologies Limited (ASX CODE: CNN). Biograde is a leading developer, manufacturer and marketer of sustainable packaging resins derived from renewable resources for the global plastics packaging industry. The company holds a strong patent portfolio for creating innovative products based on its proprietary technology. Based in Australia and established in 2002, the company manufacturing plant is in Nanjing, China, and corporate and operational offices are located in Australia, China, Germany, and the USA. Products are marketed worldwide and its business growth is fuelled by the global trend towards more sustainable packaging. Biograde was the exclusive supplier of biodegradable packaging to the 2008 Olympic and Paralympic Games. Biograde was awarded the Australian Chamber of Commerce "Australia-China Business Excellence Award" in 2008 and the 2009 CleanEquity Monaco Conference award for Excellence in the field of Environmental Technology Commercialisation. Visit Biograde at www.biograde.com.au.

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Biograde

The Carbon Economy Conference

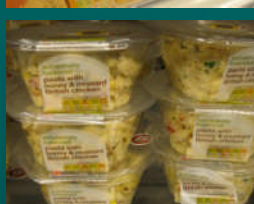
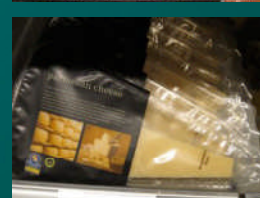
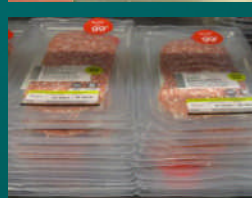
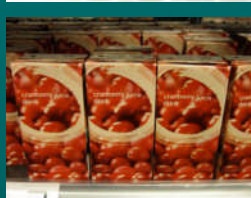
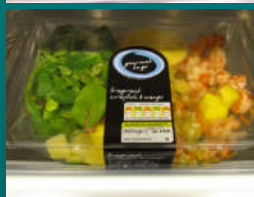
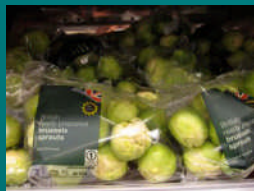
Case Study: New Materials

Presentation Overview

- Global Plastics Packaging Market
 - Overview and Drivers for Change
- Bioplastics Packaging
 - Overview of Materials and Industry
- Biograde Case Study
 - Business Overview
 - Learnings and Successes



Plastics Packaging

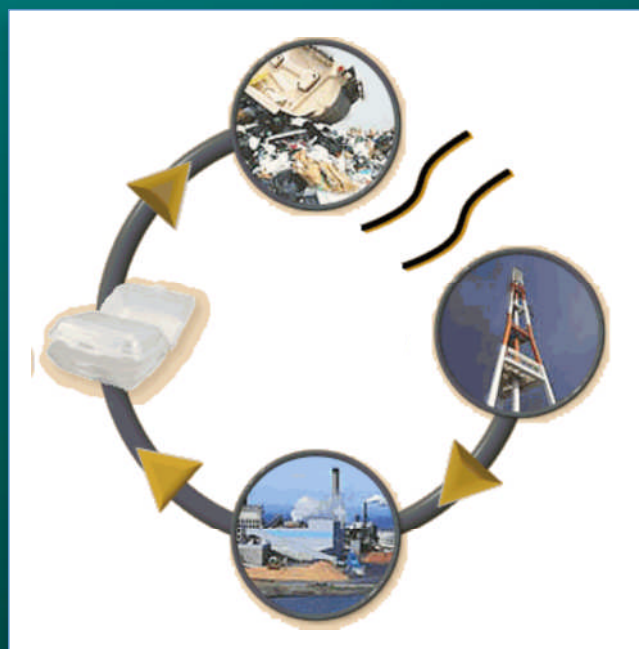


Plastics Packaging Overview

- Global plastics packaging market worth **\$180B** in 2009
- Drivers for growth
 - Economic development, societal trends, increasing demand for convenience and pre-prepared foods, decreasing household sizes
- Drivers for change
 - Made from oil – finite resource with volatile pricing
 - Mostly short-term use – waste disposal and litter issues
 - Government legislation and taxes
 - Major brand owners and retailers looking for sustainable solutions
- Sustainable and renewable packaging estimated to be <1% of plastics packaging market with exponential growth potential

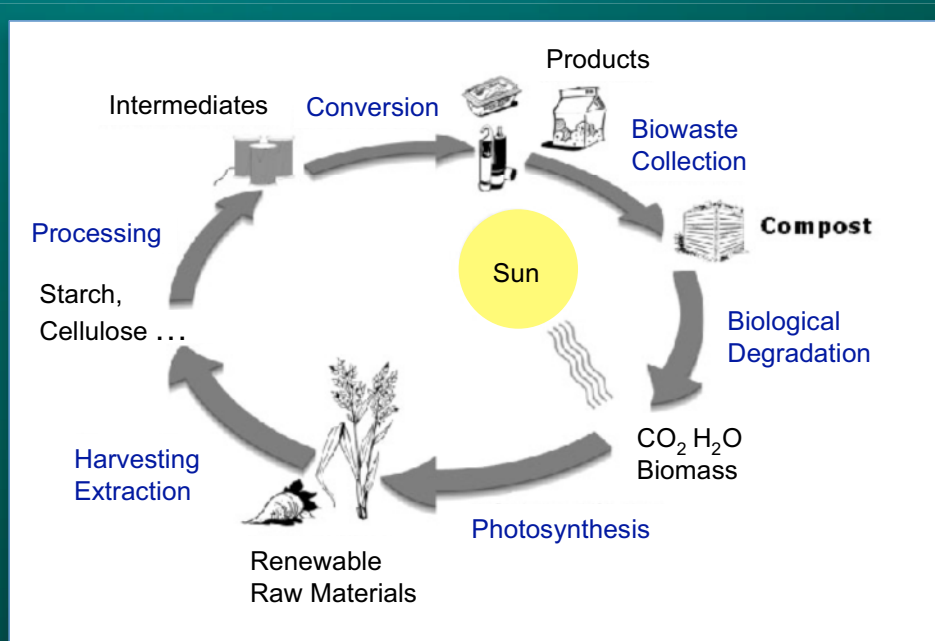
Life Cycle Example 1

Petrochemical plastics disposed in landfill



Life Cycle Example 2

Compostable Bioplastics packaging disposed in compost



Slide: Courtesy of European Bioplastics Association

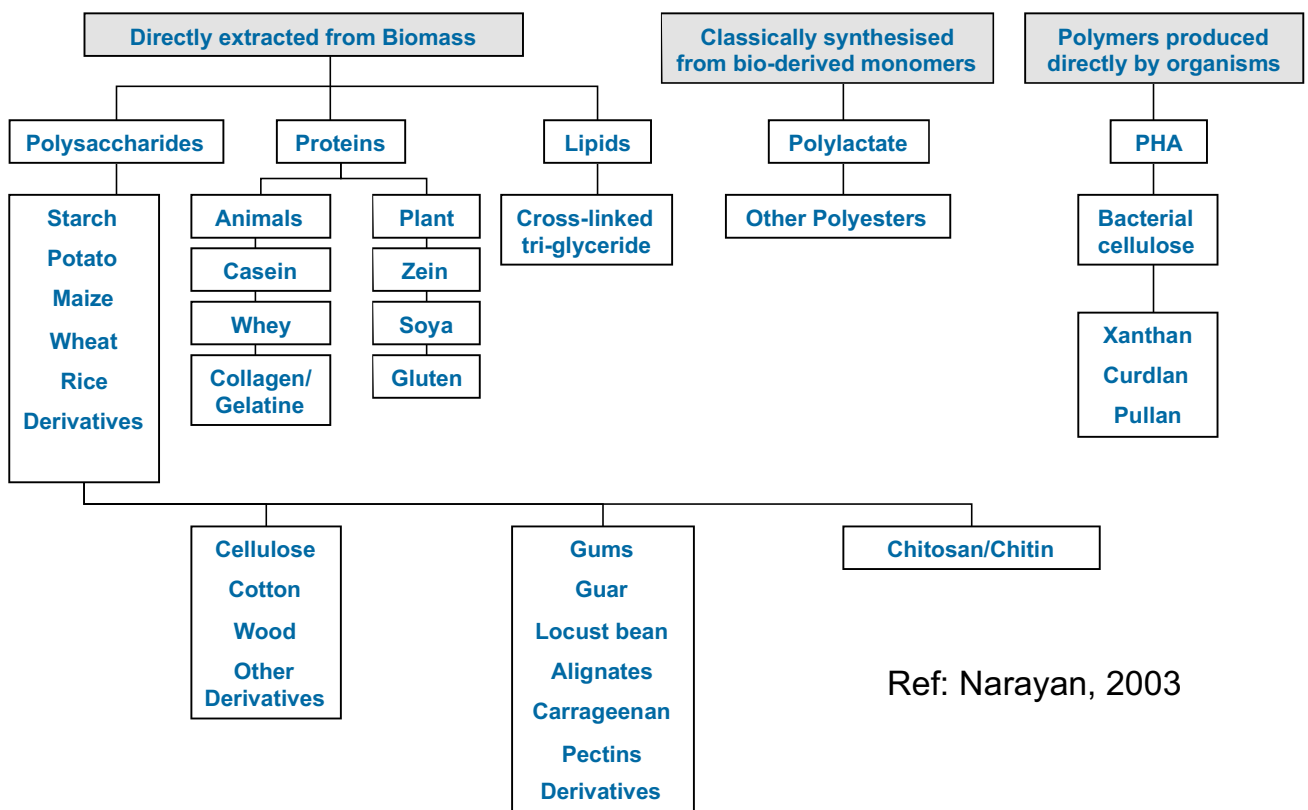
Bioplastics Definition

Plastics based on renewable resources
and/or

Biodegradable polymers which meet all criteria of
scientifically recognised norms for biodegradability and
compostability of plastics and plastic products



Plastics based on renewable resources



Ref: Narayan, 2003

Bioplastics Players

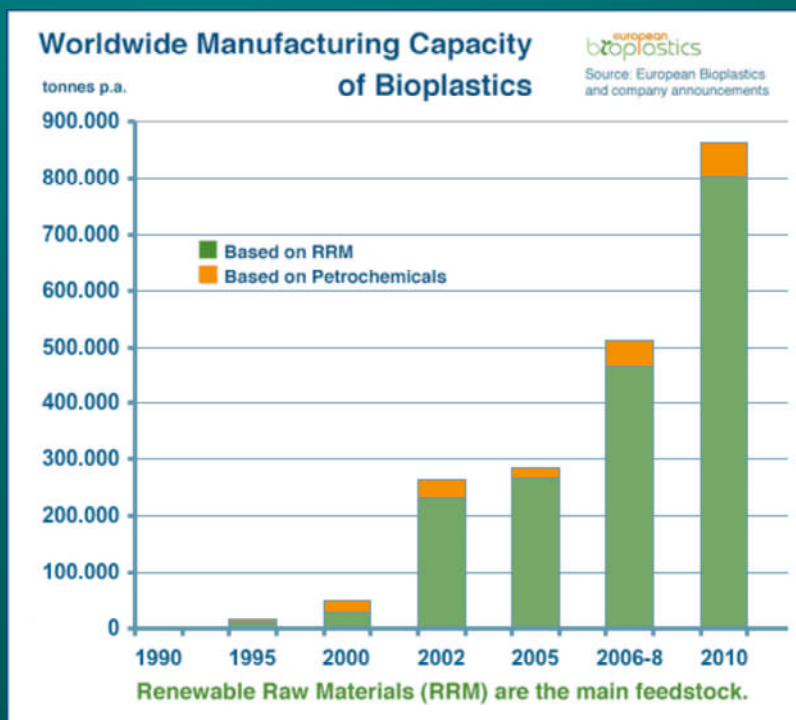
| Company | Brand | Description |
|---------------------------------|---|------------------------------|
| NatureWorks (Cargill/Teijin JV) | Natureworks PLA | Polylactic acid (PLA) |
| Rodenburg | Solanyl | Starch-based polymers |
| Novamont | Mater-Bi | Starch-based polymers |
| Cereplast | Cereplast Compostables Cereplast Hybrid Resins | Starch-based polymers |
| Biograde | Biograde, Biograde Hybrid Resins | Starch-based polymers |
| Metabolix | Telles, Mirel | Polyhydroxy-alkanoates (PHA) |
| Plantic Technologies | Plantic | Starch-based polymers |
| Innovia | Natureflex | Cellulose-derivatives |

Source: Institute for Prospective
Technology Studies, Rapra Technology

Government legislation and taxes

- Irish tax for plastic shopping bags (Aug 02)
- South Australia (May 09) and State of California (Sep 09) ban of plastic shopping bags (certified compostable bags exempt of ban)
- German exemption of DSD fee for certified compostable material
- New China packaging regulation (June 08) forbids free handout of plastics shopping bags and encourages renewable content in bags
- US Government's Federal “green” procurement preference program
- France, Italy, Bangladesh, Singapore, Taiwan, India and Mexico legislation initiatives on addressing shopping bags

Bioplastics Growth Forecast



Slide: Courtesy of European Bioplastics Association



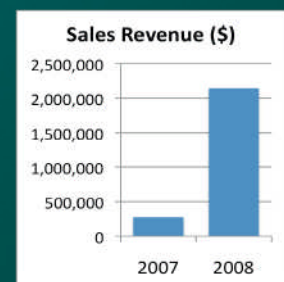
Biograde

Renewable Resource Based Plastics
And Sustainable Packaging



About Biograde Limited

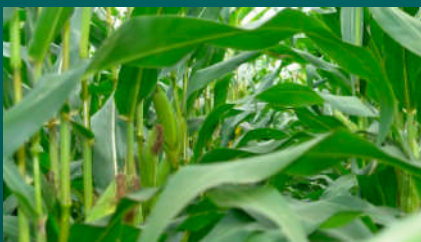
- Australian company established in 2002
- Subsidiary of Cardia Technologies (ASX code: CNN)
- Sustainable and renewable packaging technology that
 - Replaces oil in packaging with renewable content
 - Offers biodegradable and compostable packaging
- Sales started in 2007, increased in 2008 by 680%
 - Sales to high profile packaging users
 - Exclusive supply to Beijing 2008 Olympics and Paralympics
 - AustCham China Business Excellence Award 2008
 - 2009 CleanEquity Monaco Conference Award for Excellence in Environmental Technology Commercialisation



About Biograde Limited

- Extensive intellectual property and patent position
- Products accredited to international standards
- Cost-effective manufacturing in Nanjing, China
- Set up of global distributor network and operational offices
- Engaging with leading consumer goods and global packaging companies

‘Become a Leading Global Supplier of Sustainable and Renewable Products to the Plastics Packaging Industry’

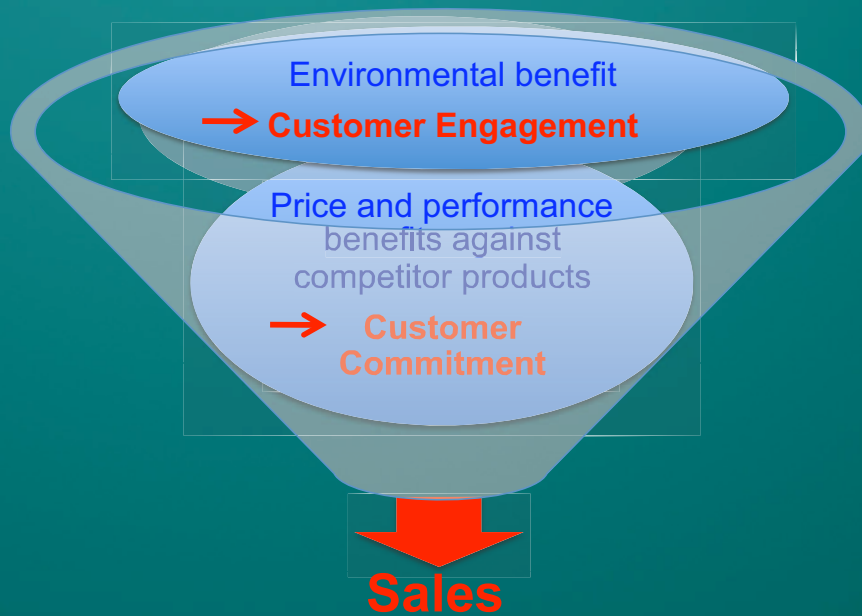


Biograde Operational Profile

- Corporate and operational center in Melbourne (Australia).
- Additional operational offices in China, USA, Germany
- Established global distributor network
- Manufacturing and product development in Nanjing (China)
- Number of employees: 51



Delivering Sales



Communication of environmental benefit
at market launch



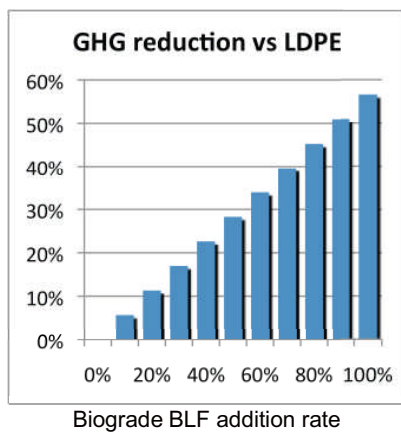
Biograde Environmental Benefit

Biograde Hybrid Resins

- High content of renewable resources
- Significant reduction in carbon foot print/green house gas emissions

Biograde Compostable Resins

- High content of renewable resources
- Functional benefits
- International certifications meeting government regulations

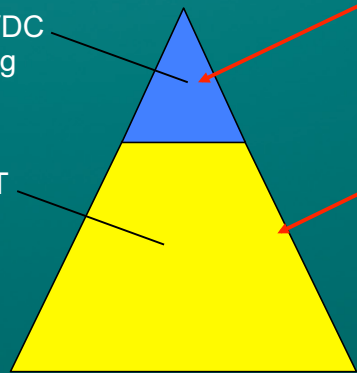


Biograde Pricing

- Commercially competitive with comparative petrochemical resins
- No additional capital required for conversion to Biograde resins by manufacturers
- Excellent conversion efficiencies

Specialty Plastics
PA, PVOH, EVOH, PVDC
Resin price: \$(4-8)/kg

Commodity Plastics
PE, PP, PS, PVC, PET
Resin price: \$(1-3)/kg



Biograde Compostable Resins

Biograde Hybrid Resins



Biograde Product Performance

- High-performing packaging resins with a wide processing and application window
- Global application development to tailor resins to customer requirements
- Broad product range covering both cost-effective Biograde Hybrid resins and Biograde Compostable Resins with specific functional benefits
- Resin supplier for standard packaging applications and/or joint application development with leading packaging companies

A simple way of contributing to more sustainable packaging



Biograde Applications



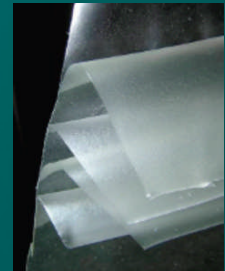
Flexible Films & Bags



Mulch Films



Shrink Wrap



Coating & Lamination



Rigids



Bottles



Injection Mould



Labels



Foams

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