

## Packaging industry's commitment to biodegradability

While caution is recommended by the PCA, the tide is rapidly turning due to the interest on the part of larger packaging companies and manufacturers.

Global packaging manufacturer Amcor has developed several initiatives to get on the biodegradable bandwagon. General manager of public affairs, David Brookes, said the company has taken a leadership role in biodegradable and compostable packaging with R&D – namely the Plantic Joint Development Alliance – and commercialisation; it supported a range of PLA bottles and film, and Nature Plus films for bakery and frozen foods. He believes that for some applications it's likely the Australian consumer will embrace compostable packaging solutions in the future, but that technology would be transferred from Europe to Australia. 'Organic food is likely to be an early adopter of degradable packaging,' he says. 'Some of the large, environmentally conscious global brand owners are likely to be the instigators in more traditional food sectors.'

In January last year, Amcor Australasia and Plantic Technologies Limited formed an alliance to work towards the development of a new biodegradable material, which had potential to change the mainstream confectionery packaging market and make this type of product more cost effective for manufacturers and retailers.

The companies are currently backing a research program that is due to wind up in February 2008, building the intellectual property of both companies. Plantic will provide its patented Plantic material – a plastic created from plants, which dissolves rapidly on contact with water. Amcor will use the Plantic material to undertake trials of the resin in a commercial packaging film operation.

Plantic Technologies' CEO, Brendon Morris, said the company expected the alliance with Amcor would expand the market for Plantic resin into flexible

Melbourne-based Ladybird Organics are packaging their new range of salads in biodegradable flow wrap film, supplied by BioPak. BioFilm is a fully biodegradable packaging product made from starch, which micro-organisms convert into CO<sub>2</sub> and H<sub>2</sub>O during composting.



## The BFA: to go biodegradable?

**WE CHATTED TO** the BFA's Andy Monk about the groups plans for biodegradable packaging in the Australian organic standard.

### Q: Is biodegradable packaging an important issue for the BFA?

**A:** Utterly. It is listed in the Australian Organic Standard as follows in Section 3.5.5: '...shall be selected... with regard to the environmental aspects of the production, consumption and use of such packaging, and exclude ozone-depleting substances.' Note that the reference is not to just use, but also production and consumption – that is the whole chain of life of products. For example, while a takeaway burger at a fast food chain might be packaged these days in a fairly innocuous brown paper bag and wrapped in paper, what sits behind this in relation to packaging is often layers of plastics and wrappings, along with long trails of transport – and therefore often even more packaging. The organic industry is predicated on principles of limiting environmental footprints, while also recognising that many people choose to consume on the run, leading to the purchase of fast and instant-type foods, and therefore more packaging. The twist, which is designed in order to protect the integrity of organic products, is that reused packaging is not permitted unless it's from organic sources, or steps are taken to ensure no contamination of organic products. This does mean that more – and new – packaging is used than could be the case. The industry needs to move towards a mixture of disposable (fully compostable) packaging, combined with reusable containers, as happens for instance in the fruit industry.

### Q: What is the biggest blockage to complete biodegradability of packaging?

**A:** Technology and the markets, which means that we should eventually see this sorted out with a good mixture of both. Clearly we are well on the way to – and in some cases have achieved – technical breakthroughs. These include starch-based trays for fruit and vegetables – already being used now in some places – and compostable bio-bags, which are also based on starches (usually potato or corn). What is still missing is hard action at both government and industry level, which requires a push from the consumer and citizen base – to demand that shires go 'plastic bag free', and similar stances. Clearly biodegradable and fully compostable (this isn't always the same thing) are usually still more expensive at the point of purchase, which means a mixture of consumer power and regulations or policies is needed to drive the change.

packaging and further advance its technology. 'The market for flexible packaging is one of the largest in the world,' he said. 'Future commercialisation of the product will contribute to environmental sustainability by reducing the dependence on petrochemical plastics and ultimately achieve a cleaner environment for future generations.'

To date, Plantic materials have been used as a rigid plastic in confectionery and biscuit trays. Plantic's collaboration with Amcor aims to develop a thin and durable plastic for the flexible packaging of food and confectionery, such as chocolate bar wrappers and overwrap. Plantic is also developing its portfolio of resins to include injection-moulding grades.

Plantic developed out of the Federal Government's cooperative research programs, and has recently closed commercial supply deals with Cadbury Schweppes, Lindt and Sprungli and the Byron Bay Cookie Company.

Production costs are a major prohibitive factor for companies looking to invest in manufacturing, but Plantic marketing manager, Kishan Khemani, says future process upgrades, streamlining and optimisation could lead to significant savings in production costs, and that research and development is already underway to achieve this. In the meantime, he says it's vital to encourage consumers to recycle, reuse, dispose of in a compost bin or incinerate. On the

manufacturing side, there is further progress. Sancell has released the first 100 per cent biodegradable padded mailing bag. Released in February this year, it received the award for runner-up for best new product at the Auspack awards 2007. Sancell is also responsible for the world's first LDPE Degradable Air Bubble Cushioning, commonly used in packaging for boxes. The South Australian company Propak Industries recently commissioned and installed machinery and technology to extrude biodegradable packing material. Using technology from the USA, the corn-starch-based material breaks down in landfill in two to four hours. Managing director, Garry Sandercock, said the material made commercial as well as ethical sense, offering a cost-effective alternative to polystyrene, paper, air pillows, bubble wrap and cardboard. The first type of product in this area is voidfill chips – for protection of merchandise during transportation.

**'Organic foods is likely to be an early adopter of degradable packaging'**

**Degradable and compostable: what is the difference?**

**DEGRADABLE REFERS TO** plastic made from a fossil fuel, with additives to help it break down over about two years. **Compostable (or biodegradable)** refers to plastic made from plant-based starch that breaks down into CO<sub>2</sub> and water. This can break down naturally in a compost bin without going to landfill.



*Anni Brownjohn, founder of Ozganics.*

100% Australian Made.

# OZGANICS

*certified organic*



**Gluten Free | Vegetarian | Dairy Free**

Imagine food grown using the age-old methods of Mother Nature herself. That means no chemicals, fertilizers, irradiation, artificial food additives or genetic tampering. Just wholesome foods, rich in essential vitamins, minerals and nutrients.

Ozganics dressings, spreads, sauces and pasta sauces contain only prime-picked, certified organic ingredients. Every product is batch-prepared in our own kitchens to ensure consistent quality and rich, natural tastes.

**NEW PRODUCT JUST RELEASED!**

LOW FAT

## Caesar

dressing

- Just 5% fat
- Egg and dairy free
- Gluten free
- Fantastic taste!





The Right Food Group Pty Ltd  
 PO Box 1484, 5/2 Lundberg Drive, Murwillumbah, NSW, Australia 2484  
 Phone • +61 2 6672 5882 Email • info@ozganics.com.au  
 www.ozganics.com.au

**the taste of living well.**

In the organic industry, there are several small companies emerging that produce biodegradable packaging. Vat Pak – which employs intellectually disabled people to contract-package organic foodstuffs – has a large packaging division that is heading in this direction. Vat Pak's Jason Shaw says the

workers do a lot of hand packing, and they have the technology to meet a range of packaging needs. 'Our organic division was really small to begin with but has grown substantially as more and more people become environmentally and ethically conscious,' he says. He agrees that biodegradable packaging will see a growth trend, as a balanced price is found between the cost of packaging manufacture and the end price for the consumer. Vat Pak also has a recycling division.

Another overt supporter of the concept of re-use is Reverse Garbage. This not-for-profit cooperative sells industrial discards, off-cuts and over-runs to the public for creative and practical uses, reducing the amount of waste going to landfill.

### Ways to reduce harmful waste

#### SOME TIPS FOR ethical disposal of your business waste:

- Send your 'leftovers' to Reverse Garbage. Visit [www.reversegarbage.org.au](http://www.reversegarbage.org.au)
- Establish a composting system for your business; include packaging in the mix.
- Re-use
  - Use durable coffee mugs
  - Use cloth napkins or towels
  - Refill bottles
  - Donate old magazines or surplus equipment
  - Reuse boxes and containers
  - Purchase refillable pens and pencils
- Keep up your recycling!

### Reducing waste in your business

If you are interested in a more proactive approach to waste minimisation, develop a plan that involves encouraging and promoting this kind of culture in your business. This will mean new procedures, training, revamping contracts and active promotions of the plan to staff and perhaps customers – but the results will be worth it, and your ethics may just be the smartest marketing tool you can use. ◆

**ATTENTION**  
**\* MANUFACTURERS \* RETAILERS \***  
**\* FOOD SERVICE INDUSTRY\***  
**....YOUR ORGANIC**  
**INGREDIENT & PACKING**  
**SOLUTION COMPANY IS HERE!**



**Australia's leader in ingredients has an extensive organic range of products and services available.**  
**Call us for your free sample and to discuss your product development ideas.**

**AUSTCHILLI P/L**  
**Phone: (07) 4150 3300**  
**Email: [info@austchilli.com.au](mailto:info@austchilli.com.au)**  
**Bundaberg Queensland Australia**



Karma Kitchen aims to provide you with good quality vegetarian and vegan meals from fresh organic produce, in a convenient and cost effective way.

**02 9476 1634 or**  
**[www.karma-kitchen.net](http://www.karma-kitchen.net)**

**FEEDING YOUR SOUL**