



PCA

PACKAGING COUNCIL OF AUSTRALIA INC

AUSTRALIAN PACKAGING
real examples of change & innovation
www.pca.org.au

Second edition 2008

Foreword

Each year, every Australian sends an average of one tonne of waste to landfill. This pressure on our environment and our economy simply cannot be sustained.

Packaging material represents about ten per cent of the waste produced in Australia. Communities are well aware of the problem. People need only look as far as their household rubbish bin, filled with packaging materials from everyday consumer items. Every Australian can help by recycling and by choosing products which create less waste.

The Australian Government shares community concerns about waste and the need for urgent action to reduce the amount of packaging waste going to landfill - but governments can't meet this challenge on their own.

It is vital that industries involved in the packaging supply chain recognise and take responsibility for the environmental consequences of their business operations. Recycling has been the main focus of companies' sustainability efforts regarding packaging to date. Much has been accomplished, but there is more to do.

A voluntary agreement, the National Packaging Covenant was launched in 1999 by governments and industries involved in the packaging supply chain. The Covenant sets a recycling target of 65 per cent by the end of 2010 (up from the 2003 level of 48 per cent) and includes a commitment to cap the quantity of packaging waste disposed to landfill by this date.

The first edition of Australian Packaging – Real Examples of Change and Innovation, released in February last year, showcased ways companies who had signed up to the Covenant were meeting the challenge.

This second edition tells more stories of innovation in the design, development and manufacture of packaging in Australia, providing consumers with end-products that reduce packaging waste and greenhouse emissions.

I commend the companies involved for their excellent efforts. Nonetheless, it is critical that all of us in government, industry and the community build on this success, and, with a sense of urgency, seize every opportunity for reducing the environmental impact of packaging throughout its lifecycle. Mutual commitment to the National Packaging Covenant is vital for meeting this challenge.

I congratulate the Packaging Council of Australia for publishing this booklet. I hope the admirable efforts of the companies showcased in this publication inspire other packaging companies to find ways to reduce their environmental footprint and make their businesses more sustainable in the long-term.



The Minister for the Environment,
Heritage and the Arts,
the Hon. Peter Garrett MP.

Amcor	2
Australian Inhibitor	3
Brita Water Filters	4
Cheviot Bridge	5
Form Cut Pty Ltd	6
Golden Circle	7
JMB Beverages Pty Ltd	8
Kraft Foods Australia	9
NCI Packaging	10
Outerspace Design Group	11
Propak Industries	12
Rebul Packaging Pty Ltd	13
Sancell Pty Ltd	14
SIGNUM	15
VIP Packaging	16
Viscount Plastics (Australia) Pty Ltd	17
Summary - First Edition	18-23

For enquiries please visit our website

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amcor surefresh™ produce carton

Amcor offers a wide range of packaging products and related services, including corrugated boxes, cartons, aluminium cans, closures, flexible plastic packaging, multi-wall sacks and wine glass bottles.

BACKGROUND Amcor SureFresh™ is a new generation of fresh produce cartons which signals simpler and more sustainable packaging solutions. Combining superior strength and moisture resistance, the high gloss black film and paper laminate carton reduces scuffing, tearing and sagging.



Before

“Regular pre-printed black corrugated trays of multiple sizes (many smaller due to heavy weight of some fruit types), RPCs (returnable plastic crates) and some non-recyclable wax coated trays (for wet or damp produce)”.

after

This fresh produce carton eliminates black printing on a paper substrate from the process and the use of water and detergent for cleaning. It has a one-touch distribution capability, which cuts down on energy use and extra packaging material. The laminated tray offers a high visual impact suitable for retail ready presentation and is recyclable through standard paper and cardboard recycling streams. A six per layer delivery and no return transportation makes Amcor SureFresh™ a cost effective, sustainable packaging solution.

holden export engines vci protection

Australian Inhibitor was formed in 1955 to develop, manufacture and supply a range of proprietary volatile corrosion inhibitor packaging products to provide a simple and effective means of protecting metal items from rust and corrosion in storage and transit.

BACKGROUND Prior to Holden exporting their engines, they are test run as part of a normal quality assurance process. After the test run, water coolant cannot be totally drained from the engine and can migrate during overseas transport, potentially causing instances of corrosion on the clutch and flywheel. Australian Inhibitor was approached to investigate and recommend a solution to this problem.



Before

Plastic wrapping material would be taped to the fly wheel and clutch, which proved to be a tedious and messy method of protection. Not only was this highly labour intensive, it was not always uniform in its ability to protect. The plastic wrapping was also not recyclable due to the random selection of material, as well as residue tape.

after

The new rigid polystyrene, incorporating vapour corrosion inhibitors, is a new generation plastic, which is designed into a snap on cover. It is fully recyclable and can be regranulated and made into alternative products at the conclusion of its current life cycle. The saving on plastic and tape usage equates to 1,000kg annually. The new cover is easily fitted by operators and can be “locked in” so it could not be displaced during transit, this increases supply chain efficiencies for transport of the engines overseas.

BRITA water filters

BRITA fill & go bottle

BRITA Water Filter Systems, established in 1966 in Germany, pioneered the concept of the water filter for domestic use. Today BRITA has distribution in over 70 countries. BRITA has been distributed in Australia since 1987; and since 1993 by its own subsidiary.

BACKGROUND The number of water bottles going to landfill and the energy cost of producing bottled water and transporting it is becoming a topical issue in today's media. Australia's demand for bottled water takes 314,000 barrels of oil a year to package, ship and refrigerate a product that is already piped to every single suburban premises. In Australia, only 35% of water bottles are being recycled, and around 55% are going to landfill.

The introduction of the BRITA "Fill & Go" filter sport bottle to the Australian market has the potential to provide a cheaper alternative to bottled water, a healthier alternative to tap water and will potentially minimise the amount of bottles going to landfill.



AFTER

before

Water bottles. For the bottled drinking water market, the bottles are one use packaging items.

after

The Brita "Fill and Go" is a sports bottle with an activated carbon filter inside, enabling users to fill from any tap and filter out unpleasant tastes and odours (while retaining fluoride). Both bottle and filters are manufactured in Sydney. The filter processes up to 57 litres or 80 refills of tap water. This development is targeted at active consumers, including children, by offering a convenient and economical alternative to bottled water. This will effectively reduce the amount of water bottles going to landfill, by encouraging users to reuse and refill with tap water.

cheviot bridge

long flat b-pack – tetra prisma aseptic 1 litre pack

The Cheviot Bridge Wine Company is based in Melbourne, Australia.

BACKGROUND Cheviot Bridge spent a significant amount of time searching for new packaging formats that have a reduced impact on the environment. Their efforts uncovered the B-Pak, a Tetra Prisma Aseptic 1 litre pack, which has all the benefits of a bottle in an environmentally friendly and convenient pack.



before

Standard Long Flat wine glass bottle.

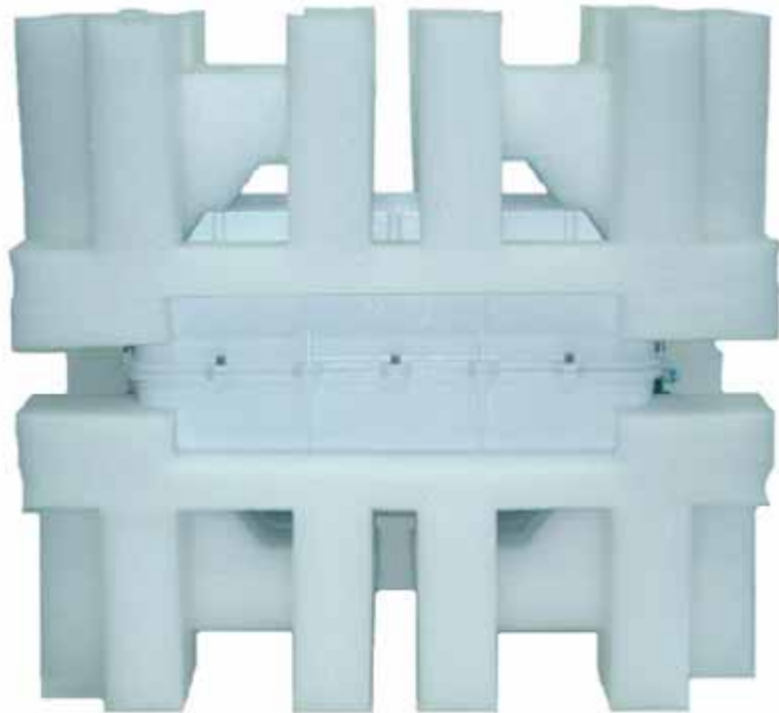
after

The new Long Flat B-Pak Tetra Prisma Aseptic 1 litre pack is made from 74% paper board. It reduces packaging waste by more than 90%, greenhouse emissions by 75% and energy requirements by 50%. The new B-Pak is convenient, lightweight and holds 33% more wine for exactly the same price as a 750ml bottle of Long Flat.

codan high power pa packaging set

Form Cut Pty Ltd is a manufacturer of packaging and gasket solutions servicing Australian industry.

BACKGROUND A European Union Directive in 2004 regarding packaging waste obligations impacted on exporters and created a demand for environmentally friendly packaging alternatives. As a result, Form Cut Pty Ltd was approached with a design brief to produce a recyclable packaging alternative to polyurethane foam inserts, reduce product damage in transit and reduce costs.



Two piece packaging set protecting a High Power PA.

AFTER

before

Polyurethane foam inserts for packaging of export products. The packaging incorporated a white cardboard box and up to nine individually shaped foam inserts. The polyurethane foam used was not recyclable and there was a negative environmental impact due to the bleaching of the white cartons.

after

The Codan High Power PA Packaging Set, has introduced numerous benefits including cost savings and environmental responsibility. The polyethylene used is readily recyclable, the overall packaging size is as compact as possible thereby maximising shipping efficiencies and by changing to natural cardboard (not pictured) the environment is saved from the impacts of the bleaching process. Other savings discovered over time included a 50% reduction in the total packaging time per unit, eliminating the replacement cost of goods damaged in transit, reducing inventory and warehousing requirements, eliminating individual packaging part loss and creating a single supplier arrangement. Direct cost savings were achieved with an overall reduction in the combined cardboard and foam packaging materials cost.

440g food can

Golden Circle manufacture over 500 products including shelf stable fruit and vegetables (in cans and glass jars), fruit juices, fruit drinks, cordials, soft drinks, jams, conserves and baby food.

BACKGROUND Recently, considerable activity has taken place to reduce the cost and lightweight the steel cans produced by Amcor Food Cans for Golden Circle, which significantly reduces the energy required to make the can. Review of all elements associated with cost, manufacturing, filling and handling, transport and retailing were taken into account.



before

Can thickness of 0.19mm.

after

The steel can thickness of the new 440g Food Can has been reduced from 0.19mm to 0.16mm (15.8%). This equates to an approximate saving of 35 tonnes in material use, with a projected saving of 125 tonnes by late 2007. Steel cans are 100% recyclable. Every tonne of recycled steel saves 1131kg of iron ore, 633kg of coal and 54kg of limestone.

JMB Beverages Pty Ltd is a privately owned company providing innovative, profitable and high quality beverage brands to consumers worldwide. JMB Beverages is based in Hornsby, NSW.

BACKGROUND JMB Beverages sought to reinvigorate packaging and product innovation to the Australian market by delivering an attractive, recyclable and unique packaging solution that exceeded occupational health and safety expectations and satisfied “best practice” product development criteria.



AFTER

GLASS WINE BOTTLES.

before

after

Brightlite Wines are packaged in recyclable aluminium bottles, a first for the Australian market. There is a 95% energy saving in recycling aluminium to that of producing aluminium from bauxite. The bottle is 15% of the weight of an average empty glass wine bottle and 30% lighter than a full glass bottle (750ml). The bottles are totally shatter proof. The financial return on one tonne of recycled aluminium is \$1800 compared to \$285 for glass and one tonne of recycled aluminium produces 3,350 bottles, compared to 2,350 glass bottles.

Kraft Foods Australia is a subsidiary of Kraft Foods, a branded food and beverage company. Kraft Foods market various food brands in Australia including Vegemite, Kraft cheese, Kraft Peanut Butter, Maxwell House coffee, Ritz biscuits and Toblerone chocolates.

BACKGROUND The National Packaging Covenant has increased the overall awareness and profile of technical decisions with regards to packaging material selection, packaging designs and the overall recycled levels in packaging materials being used. The developments with PET bottle design are an example of this.



300mL Liquid Dressing PET Bottle.

before

after

The 300mL Liquid Dressing PET Bottle re-design has over a 13% bottle weight reduction equating to approximately a 52 tonne reduction in PET. The bottle redesign increased pallet utilisation by 21% providing a further environmental benefit of reducing carbon dioxide emissions. This bottle was launched in 2007. The re-design was achieved without loss of functionality or performance on line. The new bottle is also able to withstand a greater top to bottom compression enabling no loss in pallet stack loading.

NCI Packaging is a supplier of metal and plastic packaging supporting leading industrial, food and foodservices brands across the Oceania region in bringing their product to market.

BACKGROUND With brand owners and consumers asking for packaging with superior lid retention, strong shelf presence and sustainability, NCI Packaging has developed a performance range of 10, 15 and 20 litre pails.



before

Industry standard pails that are produced from a mixture of materials – including plastic and wire - are difficult and expensive to recycle. Easy-to-remove lids often resulted in variable lid retention and consequential supply chain issues.

after

The new range of 10, 15 and 20 litre XlerPail™ was developed in Australia by Australians. It is made entirely of polypropylene, identified by the recycling symbol Number 5 - and is collected in most kerbside systems.

An enhanced seal using the nSeal™ lid, results in a leak-proof seal and superior lid retention during transport.

XlerPail™ is the only all-plastic pail to pass the Australian Standards for rigid plastic containers and yet uses up to 15% less plastic. And, all this is achieved using less electricity.

Outerspace Design Group is a Melbourne based industrial design company providing product development support for the Fast Moving Consumer Goods market via a dedicated structural packaging division.

BACKGROUND Traditional liners are individually wrapped in a protective flexible film and then placed in either an outer film package or carton board. All items are single use and the outer wrapping provides little protection for the liners when in a purse. Millie and More wanted to introduce a protective, discreet and compact purse ready liner pack that reduced the amount of disposable items.



AFTER

before

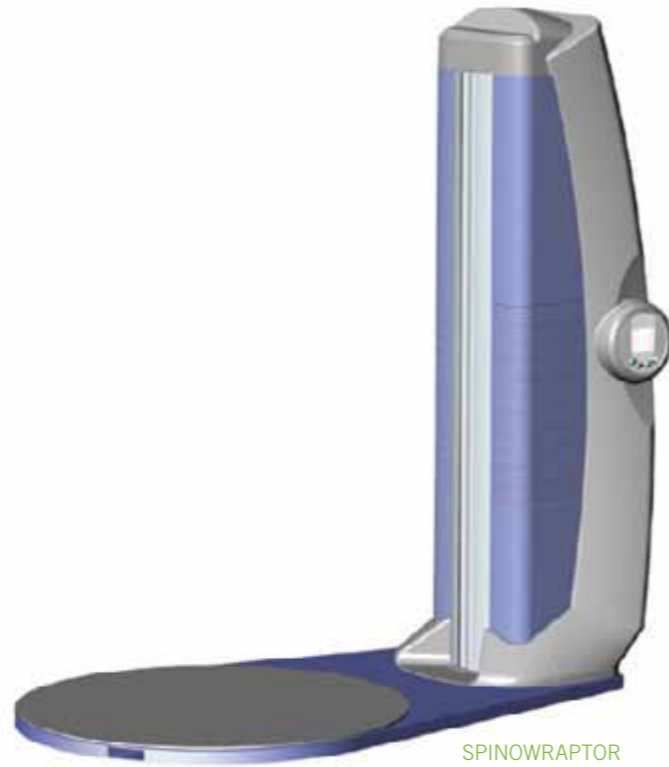
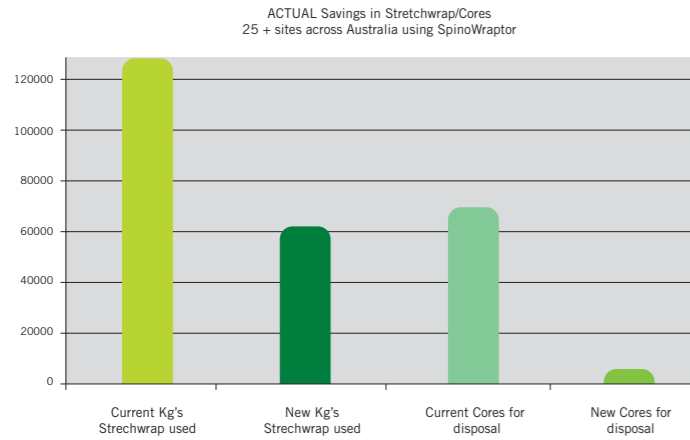
Individual liner flexible sleeves, outer flexible bag and outer carton board box.

after

Tin provides rigidity and protection of the product. Produced from 100% recyclable steel, the tins are reusable and can be used for storage of hairpins, jewellery or other personal effects. The liners themselves have a protective label and wrapper in one, which eliminates any bulky separate wrapping material. This has reduced overall size of the compact by approx 35%.

Propak Industries is an importer and distributor of state of the art machinery with a focus on end of line packaging, particularly pallet wrappers.

BACKGROUND After attending Interpack 2005 in Düsseldorf, Propak was appointed exclusive Australian agent for Epipack's "SpinoWraptor" range of pallet wrappers. Propak has conducted over 80 audits at user facilities including REPCO, DHL and Polymer Processors and has been able to prove that with the right machine and proper training significant savings in stretch wrap and the bottom line will be made. "Before and After" figures below are taken from 25 completed audits where SpinoWraptor machines are installed.



before

The total annual usage of stretch wrap at the 25 facilities was 128,723 kg. Additionally 73,076 roll cores (cardboard) had to be disposed of annually.

after

With the use of the SpinoWraptor range of pallet wrappers the total annual usage of stretch wrap fell to 62,275 kg (a 51.62% reduction). The roll cores requiring disposal fell to 3,920 per annum (a 94.6% reduction). These reductions benefit both the supplier and the receiver of the wrapped goods. Environmental benefits include reductions in the use of oil stocks used to make the stretch wrap and the energy used to recycle the plastic after removal from the pallet at the final destination.

Rebul Packaging Pty Ltd is an Australian manufacturing company specialising in high strength crating for delicate and valuable goods needing optimum levels of protection when transported regionally, interstate or overseas.

BACKGROUND The Rebul concept was born out of the idea to develop an environmentally friendly, high strength bulk packaging product that was light, easy to use and reuse.



before

Wooden crates and cardboard boxes.

after

The Rebul Pack is made of 100% paperboard and its uniquely engineered design is lightweight, without sacrificing strength. The material make up provides high shock absorption and low abrasion compared to traditional crating methods, meaning less internal packing material is required. Its design enables easy packing and unpacking from any side, without the need for tools and can disassemble into a flat pack for ease of transport and storage. The Rebul Pack is reusable and recyclable and does not require fumigation for export, like wooden crating.

Sancell Pty Ltd is a plastics extrusion company operating out of Braeside, Victoria with distribution extending across Australia, New Zealand and the Pacific Islands.

BACKGROUND Plastics have become an integral part of everyday life. The numerous plastic products used daily by society (often, single use) have however, added to landfill and pollution problems. In particular, 95% of all bubblewrap ends up in landfill. Sancell set out to develop an environmentally friendly packaging alternative to bubble wrap.



before

Polyethylene bubble wrap.

after

Sancell's EnviroBubble is the worlds first 100% Low Density Polyethylene (LDPE) fully degradable padded mailing bag, with a shelf life of approximately 18 months. EnviroBubble is designed to break down quickly in landfill and be absorbed back into the soil with no harmful residues. Because EnviroBubble uses a non-starch based degradable additive it can be recycled as well as decomposed.

SIGNUM is a recycling, extrusion and packaging manufacturer, with operations in Melbourne, Sydney, Wodonga and Auckland. SIGNUM's recycling facility at Albury sorts, grinds and processes waste PET bottles into food application approved resin for extrusion and thermoforming.

BACKGROUND In August 2007, SIGNUM commenced supply of Recycled (RE-PET) PET Sundae Cups to McDonald's.



AFTER

before

Cold drink and dessert cups and lids were made from rigid Polystyrene.

after

The use of RE-PET (Post consumer recycled content PET), reduced polystyrene use by 700 tonnes. All Sundae Cup packaging supplied by SIGNUM now contains a minimum of 35% Post Consumer PET.

gyprock compounds plastic pails

VIP Packaging is a packaging solutions provider for the retail and industrial markets.

BACKGROUND During 2006/07, CSR commenced the transition of its entire range of Gyprock pre-mixed compounds to injection moulded polypropylene plastic pails. VIP Packaging set out to create pails that were not only functional, but were designed with the environment in mind.



BEFORE



AFTER

before

The previous pails were 20-30% heavier with only a handle for lifting (no support lugs) and a simple sticker for the label area.

after

The new pails possess a number of features that deliver improved functionality, cost efficiencies and environmental outcomes. Using the latest European technology, VIP Packaging is able to produce more pails using the same amount of kilowatt hours expended to produce the previous range. This is due to a combination of improved technology and better quality raw materials. The result is a lighter, tougher pail that consumes less electricity in production. In addition, VIP Packaging Sustainability Services is working with CSR to develop a dedicated recovery method for the Gyprock pails. Ultimately, pails will be returned to VIP Packaging for conversion into post-consumer recylate (PCR) to divert waste from landfill and create new products. As of 18/9/07, 400kg of pails have been collected.

23l returnable enviro crate

Viscount Plastics (Australia) Pty Ltd is a manufacturer and distributor of rigid plastic products throughout Australia and Asia, used in the packaging, materials handling, automotive and industrial markets.

BACKGROUND The 23L Returnable Envrio Crate was developed to eliminate waste from the farm and supply chain. It has replaced corrugate shipper's that normally have a short life. By using a returnable/reusable rigid plastic crate, it is possible to achieve multiple trip uses and an extended service life.



AFTER

before

Corrugated tray with a life expectancy of between one and five trips, after which it is then discarded.

after

The 23L Returnable Enviro Crate is a light weight plastic crate, made of food grade polypropylene (PP), lasting several hundred trips and has a life expectancy of seven years plus. The size of the crate is 1/6th of the Australian pallet size, making it efficient for transportation and logistics. Since commercialisation in February 2007, customers have used 20,000 less cardboard waste cartons, achieved \$60,000 savings in carton purchases and \$20,000 savings in damaged stock due to cardboard trays collapsing. At the end of service life, Viscount Plastics offer to take back the crates for re-birth or to facilitate recycling.

Following are the examples contained in the first edition of this publication which was released in March 2007.

AMCOR ST REGIS BATES - Maxipack

Amcor St Regis Bates is a multiwall sack business within Amcor Flexibles Australasia, located in Victoria.

BEFORE
The Pack was made of three layers of sack kraft and one layer of polymer sheet, with a total sack weight of 312 gsm of materials. The kraft was coloured pink to signify a "High Wet Strength" additive. This additive makes the paper unrecyclable.

AFTER
Maxipack is now made of two layers of high strength sack kraft and one layer of higher strength polymer sheet, with a total sack weight of 235 gsm of materials. Material use in the Maxipacks has been reduced significantly – Kraft paper per sack reduced by 31%, polymer per sack reduced by 20-25%, freight (energy), road transport and sea freight costs have been reduced by 10-18% due to the block shape developed after filling, thus allowing better stackability. The omission of pink dye from kraft allows greater recyclability. Although still being introduced to the dairy industry, fully implemented, these changes represent a reduction of 1,500 tonnes of paper and 370 tonnes of polymer usage per annum.



AUSTRALIA POST - WinePak (Wine bottle shipping container)

Australia Post is a government/ business enterprise providing products and services across three core business areas – Letters, Retail Agencies and Services, and Parcel and Logistics.

BEFORE
Polypropylene Wine Pak, injection moulded in one piece. Pack is tamper evident and therefore can be used only once. The Polypropylene pack is not recyclable.

AFTER
Cardboard WinePak, 100% recycled content / 100% recyclable. The new WinePak has increased product protection, as well as being re-useable and fully recyclable.



BOTANICAL FOOD COMPANY - Distribution Cartons

Botanical Food Company owns, manufactures and distributes the Gourmet Garden brand of fresh herbs and spices in a tube.

BEFORE
Botanical Food Company's packaging suppliers would supply their packaging in cartons. Once empty these cartons were broken down and sent to offsite recyclers.

AFTER
One significant change in 2006 involved negotiating with a major packaging supplier to supply packaging in the same sized carton that Botanical Food Company uses for finished goods. This meant that they could reuse over 36,000 empty cartons per year, which equates to an 18% reduction in total waste annually.



CADBURY SCHWEPPE'S - Gatorade 600ml Thirst Quencher

Cadbury Schweppes Plc is an international confectionery and beverage company. Cadbury Schweppes Pty Ltd, representing the Australian business, sells a range of products including moulded chocolate bars, seasonal products, sugar confectionery, carbonated soft drinks, fruit juices, sports drinks, bottled water, cordials and jams.

BEFORE
The old Gatorade bottle weighing 38g used a wrap around label made of Bioriented Polypropylene (BOPP) film.

AFTER
The Gatorade Bottle is the first sports drink in Australia to use 20% post-consumer resin (PCR) in its primary packaging. A new "Roll On Shrink On Label" (ROSO) has been introduced to suit the new lightweight bottle design. ROSO is inert and can be effectively recycled, compared with traditionally shrink labels made from PVC material, which causes havoc with PET recycling. The new 600mL Gatorade bottle design, as well as incorporating PCR, has allowed the bottle to be reduced in weight from 38g to 33g, equating to a 13% reduction.



CAMPBELL ARNOTT'S AUSTRALIA - PET Biscuit Trays

Campbell Arnott's is one of Australia's leading food manufacturers, producing biscuits, soups, snacks, stocks, ready meals and beverages for the Australian and export markets.

BEFORE
Biscuit trays made of non-recyclable MIPS.

AFTER
Biscuit trays are now made of PET supplied by SIGNUM. PET trays are recyclable through existing kerbside recycling collection systems. A selected group of PET trays were down-gauged, which resulted in the removal of up to 18% of the PET material from the trays. A small cost benefit was achieved as a result of the down-gauging. Changes resulted in the elimination of 1,000 tonnes of non-recyclable plastic MIPS from the waste stream.



CHEFS PRIDE/CREATIVE GOURMET - Improvement in Ratio of Product to Packaging

Chefs Pride is a private company manufacturing and packing a range of frozen food products and a small range of chocolate products. Its sister company, Creative Gourmet, manufactures and markets a range of frozen fruit in the retail sector.

BEFORE
Frozen raspberry product packed in both 300g (product to pack ratio 6.5) and 500g packs (product to pack ratio 7.9).

AFTER
In collaboration with the major retailers, the larger pack was promoted more widely and made available in more stores. Sales data depicted a significant switch to the larger pack. The ratio of content to packaging for all retail raspberry products sold had improved from 6.5 in 2004/5 to 6.9 in 2005/6, with early signs indicating a continued shift to the larger pack. Changes to similar product (Blueberry) ranges have also been made.



CHEP ASIA PACIFIC - FB2 Foldable Bin

CHEP Asia Pacific is part of the worldwide CHEP organisation that operates in 42 countries and controls more than 218 million pallets worldwide and over 47 million reusable plastic containers.

BEFORE
One-trip packaging such as cardboard bins, as well as wooden bins and bulk bags.

AFTER
The FB2 Foldable bin has rigid, injection-molded plastic walls that allow it to be safely stacked six-high, improving storage efficiencies. The foldable design gives efficiency in transport, reducing greenhouse gas emissions. Produce also arrives fresher because the FB2 is fully ventilated. Unlike cardboard bins, the Folding Bin is reusable and its construction material can be fully recycled. This not only cuts solid waste going to landfill, but it also saves the supply chain from the costs of disposing of one-trip packaging.



COCA COLA AMATIL (AUST) PTY LTD - Retail-Ready Packaging, 'Cray'

Coca-Cola Amatil (CCA) is Australia's largest manufacturer and distributor of soft drinks and other non-alcoholic beverages, and the market leader in the industry.

BEFORE
The wraparound, RSC and OTOR (Drop Packer) cartons were designed to provide adequate structural integrity through both CCA and their customers' supply chain, while providing the necessary product information to assist with recognition, scanning and waste disposal. These cartons required increased glue usage and had the potential to cause OH&S issues when incorrect lifting techniques were employed to pick cartons. Pallets moving interstate were also wrapped with pre-stretched wrap to reduce transit damage.

AFTER
The 'cray', is a unique packaging solution and the first of its kind in the marketplace. Pioneered by CCA, 'cray' is currently used only in Queensland. It provides the structural integrity and useability required by shelf-ready packaging while offering CCA reductions in packaging and increases in functionality including enhanced shelf presence and marketing appeal. The packaging reductions come from a 55% reduction in cardboard and a 65% glue saving. The move from wraparound cartons to 'cray' resulted in a total weight reduction of approx. 153, 000 kg.



FORMRITE GROUP - Lindt Lindor Balls Tray

The FormRite Group has been an Australian owned business for over 40 years and provides a complete service for customers in all packaging and point of sale requirements. The FormRite Group is the exclusive distributor of thermoformed trays for Plantic Technologies Limited in New South Wales.

BEFORE
Trays made from Amorphous PET (APET) material.

AFTER
Trays are now made from biodegradable (water-soluble) corn starch material, which is dispersible in water. This will benefit the environment by minimising waste at landfill.



HUHTAMAKI AUSTRALIA - ShoPak Fruit Tray

Huhtamaki is a global leader in the manufacturing of specialty food packaging and food service products.

BEFORE
Individual rectangular shaped trays were used for different fruits. These sizes didn't efficiently fit onto an Australian pallet, leaving empty space when shipping. Dyes such as Methyl Violet were used to colour the trays.

AFTER
The new ShoPak fruit tray design saves 5% in raw materials for manufacturing of the product compared to the previous rectangular shaped trays. ShoPak is made from 100% recyclable material and is available in 100% reusable natural colour. The trays are multi-purpose allowing different types of fruits to be packed on the same tray. This reduces overall material and energy use, and represents a saving of greater than 10% for growers packaging costs, as well as a reduction in logistics costs for all stakeholders.



INGHAMS ENTERPRISES - Formacoat Board

Inghams Enterprises is a multifaceted company contributing to the food industry, in particular the poultry sector. Inghams is the largest integrated producer of poultry meat products in Australia.

BEFORE
Potlatch board, a "virgin" board sourced from the United States. To further enhance its strength in the freezer, the board is poly-coated on both sides for the purpose of moisture and oil resistance. Lead times involved from order to delivery are a problem as are its poor recycling qualities.

AFTER
After extensive research, development and trials, a new board called Formacoat was selected. Formacoat will halve the lead times and avoid the need for plastic poly-coat on either side of the board. This represents a total saving of approximately 40 tonnes of plastic coating based on an average yearly board usage.



MADURA TEA - Gold Cylinder Pack

Madura Tea Estates is a grower and manufacturer of tea. They also import, blend and pack their range of teas on their Estate at Clothiers Creek Valley, Northern Rivers Region, New South Wales.

BEFORE
Old style Red Cylinder was derived from virgin cartonboard sourced from China. The weight of the carton was 60.6 grams. The Tea Bag (or Leaf Bag) was made from nylon, with string attached.

AFTER
Gold Cylinder. Silver foil laminated carton board 500 um artcote plus board. This material has 15% recycled content while providing a superior printing surface. The weight of the new container is 51.0 grams, which gives a weight saving of 15.8% per unit. The Leaf Bags are now made of 100% biodegradable plant starch derived mesh, without string or tag.



MEADWESTVACO PACKAGING SYSTEMS - BEVERAGE GRADE BOARD (MBGB)

MeadWestvaco Packaging Systems, a wholly owned subsidiary of the MeadWestvaco Corporation, provides paperboard packaging solutions to the beverage, food and dairy industries.

BEFORE
The worldwide supply of High Wet Strength (HWS) paperboard contains an average of 10% to 15% recycled content with all of Australia's HWS board requirements being met by imports.

AFTER
MeadWestvaco Beverage Grade Board (MBGB) is a locally produced HWS paperboard. The paperboard has a 76% recycled content reducing the introduction of imported waste into the system. MBGB was released into the market in 2006 and is proving to be comparable in performance to existing HWS board currently in the market place.



NATIONAL FOODS LIMITED - New 1kg Yoplait Yogurt Tub

National Foods Limited is one of Australia's largest food companies with core activities in fresh dairy foods, juice, milk and specialty cheeses.

BEFORE
Multi component packaging consisting of polystyrene, foil and PVC over-lid. The combination of materials made recycling difficult and expensive.

AFTER
Both the base and the lid are now made of the same (polypropylene) materials. As well as being more effectively reusable by the consumer, the new polypropylene package is more widely collected by kerbside recycling systems.



PACE FARM - Acu-Rope Plastic Pallet Strapping

Pace Farm, a family owned company since 1946, is Australia's leading producer of eggs and egg products.

BEFORE
Full pallet plastic wrapping was used to secure goods onto the pallet for storage and transport.

AFTER
The use of Acu-Rope pallet strapping resulted in a saving of 30% plastic material use and also reduced product and packaging waste due to spoiling.



TELSTRA CORPORATION LIMITED - Pre-paid Mobile Starter Kits.

Telstra Corporation is Australia's leading telecommunications and information services company.

BEFORE
Past pre-paid starter kits had 10mm cardboard thickness, plastic sleeves (not recyclable) and adhesives used to secure the sim card. This resulted in 13.6 tonnes of total packaging going to landfill.

AFTER
As a result of the review, the tonnes of packaging for the pre-paid starter kits were reduced by 73% to 3.7 tonnes per annum. The current design reduced the cardboard packaging weight (5mm thickness). Glued adhesives and plastic sleeve were also removed from the new design.



VISCOUNT PLASTICS - 10 Litre 'Flip-Lok'

Viscount Plastics is a leading manufacturer and distributor of rigid plastic products throughout Australia and Asia, used in the packaging, materials handling, automotive and industrial markets.

BEFORE
Round 10L Plastic Pail. Stack 16 Units per layer, not totally recyclable. Re-use is minimal.

AFTER
Square 10L Plastic Pail. Stacks 25 Units per layer, increasing supply chain efficiencies and saving on material usage. (Cost savings up to 30% in some instances). New plastic handle allows for 100% recyclability of new pail, and the new "Flip-Lok" encourages re-use of pack, minimising the waste stream.



VISY BOARD - VPAC Bumper Corrugated Container

Visy is a packaging manufacturer and recycler.

BEFORE
Rectangular shaped corrugated cardboard container. This container could pack four per pallet (two height).

AFTER
The VPAC Bumper Corrugated Container is uniquely shaped to fit the form of a Bumper Bar without compromising safety or strength. The VPAC can now stack 10 per pallet (five High). This equals a 60% greater container utilisation, reducing environmental impacts through freight, air emissions and handling. There is zero stripping (where sections of the box are stripped out during manufacture, creating material waste). The VPAC Container is 100% recyclable and made from papers from Visy's sustainable kraft pulp and paper mill in Tumut, NSW.



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