

# 3R PACKAGING AWARDS 2011



# CONTENTS

Foreword	i
Introduction	ii
<b>DISTINCTION AWARD WINNERS</b>	
Asia Pacific Breweries (Singapore) Pte Ltd	1
City Developments Ltd (City Square Mall)	2
CROWN Beverage Cans Singapore Pte Ltd	3
Nestlé Singapore (Pte) Ltd	4
Sunfresh Singapore Pte Ltd	5
Tetra Pak Jurong Pte Ltd	6
<b>MERIT AWARD WINNERS</b>	
Boncafé International Pte Ltd	7
Dell Global B.V.	7
F&N Foods Pte Ltd	7
Ha Li Fa Pte Ltd	8
Hock Lian Huat Foodstuff Industry Pte Ltd	8
Kentucky Fried Chicken Management Pte Ltd	9
McDonald's Restaurants Pte Ltd	9
Starlite Printers (Far East) Pte Ltd	10
Thong Siek Food Industry Pte Ltd	10
Toshiba Asia Pacific Pte Ltd	11
Toshiba TEC Singapore Pte Ltd	11
Wanin Industries Pte Ltd	12
Winrigo (S) Pte Ltd & Prima Food Pte Ltd	12
Wyeth Nutritionals (Singapore) Pte Ltd	12
<b>PLATINUM AWARD WINNERS</b>	
Nestlé Singapore (Pte) Ltd	13
Sunfresh Singapore Pte Ltd	14
Tetra Pak Jurong Pte Ltd	15
<b>GOLD AWARD WINNERS</b>	
Ha Li Fa Pte Ltd	16
Hock Lian Huat Foodstuff Industry Pte Ltd	17
Kentucky Fried Chicken Management Pte Ltd	18
McDonald's Restaurants Pte Ltd	19
Starlite Printers (Far East) Pte Ltd	20
Thong Siek Food Industry Pte Ltd	21
Wyeth Nutritionals (Singapore) Pte Ltd	22
Members of the Singapore Packaging Agreement Governing Board	ANNEX

# FOREWORD



When we, as an industry, first inked the Singapore Packaging Agreement (SPA) in 2007, we did so with the firm belief that companies could play a bigger role in making the packaging supply chain more sustainable. Since then, we have rallied the business community to participate in the SPA, and organised various fora and activities to facilitate exchange of ideas and build industry's knowledge base in packaging sustainability.

The 3R Packaging Awards was one of the programmes that was organized to enhance industry's capability in the 3Rs – reducing, reusing and recycling – of packaging waste. Not only does the award programme serve to recognize signatories for their achievements in reducing packaging waste, but it also seeks to promote best practices, motivate producers to put in greater efforts on the 3Rs, as well as increase mindshare in what the SPA is trying to achieve.

The annual 3R Packaging Awards have been presented by the Minister for the Environment and Water Resources since 2008, and have gained much credibility and prestige over the years as the national level awards for packaging waste minimisation.

I am heartened to see that this award programme has been well-received by the industry, and that the number of signatories participating in the awards has doubled since the award was introduced. The profile of winners of this year's 3R Packaging Awards also reflects SPA's expanding effort to engage all stakeholders in the packaging supply chain, from packaging suppliers to product manufacturers and retailers. In addition, for the first time, there will be winners from the mall owners and IT sectors of industry in this year's awards. This will also be the second year that we will be awarding the Platinum and Gold Awards to signatories who have demonstrated continuous improvements in reducing packaging waste.

This booklet documents the new initiatives undertaken by the signatories to reduce packaging and packaging waste. Many of the measures taken do not just improve the companies' environmental performance but also help the companies to save costs and even improve their productivity or efficiency of operations. Over the past few years, we have seen more companies coming forward to take the initial step to review and change old practices, with some having been inspired by the award winners' success stories. I hope that companies can similarly take reference from this year's award winners' initiatives and explore ways to reduce waste.

I congratulate the recipients of this year's 3R Packaging Awards, and look forward to seeing more companies participate in this programme to make sustainability a part of their business operations.

**Albert Lim**  
Chairman, Singapore Packaging Agreement Governing Board

# INTRODUCTION

The Singapore Packaging Agreement (SPA) is a voluntary pact by industry, government and non-governmental organisations (NGOs), to work together over a 5-year period to reduce packaging waste.

Packaging waste from consumer products accounts for about one-third of waste disposed of by households in Singapore. Inaugurated in 2007, the SPA aims to reduce the amount of waste arising from product packaging and seeks to do this by encouraging businesses to review their packaging design and packaging processes and make changes that would result in less waste and more sustainable use of resources. The implementation of the SPA is overseen and driven by a SPA Governing Board, comprising senior representatives from industry, government and NGOs. The members of the Governing Board are listed in the Annex.

The signatories have made commendable progress in reducing waste since the SPA's inception four years ago. In the first three years of the Agreement (from 1 Jul 2007 to 30 Jun 2010), the signatories cumulatively reduced about 4,500 tons of packaging waste. In the fourth year of the Agreement (from 1 Jul 2010 to 30 Jun 2011), the signatories implemented further improvements to their business processes and packaging, which will enable them to potentially avoid an additional 560 tons per year of packaging waste, with potential savings of about \$2.6 million. They have managed to achieve these waste reductions through reducing the size or thickness of packaging, eliminating unnecessary packaging, using less packaging in logistic processes or changing the way products are packaged.

To encourage signatories to play an active role in reducing packaging waste, the 3R Packaging Awards (Distinction and Merit Awards) were first given out in 2008, and have since then been presented annually to deserving signatories. In 2010, additional Platinum and Gold Awards were introduced to recognise signatories for sustained efforts in reducing packaging waste. Platinum Awards are presented to signatories who have received Distinction Awards for two consecutive years, while Gold Awards are given to signatories who have received Merit Award or better, for two consecutive years.

This booklet features the achievements of the signatories who will receive the 3R Packaging Awards this year on 5th October 2011 at the Third Meeting of the Regional 3R Forum in Asia, at Sheraton Towers Singapore.



## Asia Pacific Breweries (Singapore) Pte Ltd

**3R PACKAGING  
AWARDS**  
2011

Listed on the Singapore Exchange, Asia Pacific Breweries Limited (APB) is one of the key players in the beer industry. A joint venture between the Fraser and Neave Group of companies and Heineken, APB was established as Malayan Breweries Limited (MBL) in 1931. The Company went on to open its first brewery in Singapore and launched the award-winning Tiger beer a year later.

Today, APB boasts a winning portfolio of over 40 beer brands and beer variants, including Tiger beer, Heineken, Anchor beer, ABC Extra Stout and Baron's Strong Brew. APB also operates an extensive global marketing network, which spreads across 60 countries and is supported by 30 breweries in 14 countries, including Singapore, Cambodia, China, Indonesia, Laos, Malaysia, Mongolia, New Caledonia, New Zealand, Papua New Guinea, Solomon Islands, Sri Lanka, Thailand and Vietnam.

### Measure taken to reduce packaging waste

In 2010, APB Singapore (APBS) initiated cooperation with its can manufacturer to explore ways to reduce the thickness of the base of its cans. By down-gauging the thickness of the cans from 0.280mm to 0.275mm for all its 330ml and 323ml cans, APB's effort will save a projected 7.9 tons per year of aluminium packaging material for products meant for the local market. Besides using less raw materials, this initiative will also allow its manufacturer to save energy during the production of the cans.

### OTHER ENVIRONMENTAL INITIATIVE

- APBS packs many of its products in returnable glass bottles. The bottles are returned from the consumer, washed, inspected and re-used. Where they cannot be reused, for example, if they are damaged, the bottles are then sent for recycling. In 2010, approximately 470 tons of glass waste from damaged bottles was recycled.



*Reduction in thickness of aluminium cans*



## City Developments Limited (City Square Mall)

**3R** PACKAGING  
AWARDS  
2011

City Square Mall is Singapore's first eco-mall, located at the junction of Serangoon Road and Kitchener Road. Owned and managed by City Developments Limited, the mall has some 200 tenants that cater to the lifestyle needs of everyone in the family. Connected to Farrer Park MRT station, City Square Mall is one of the largest malls in Singapore with 700,000 sq ft of gross retail space, offering the perfect setting for the community to meet, shop and play while acquiring an eco-learning experience.

City Square Mall is Singapore's first shopping mall to be awarded the Green Mark Platinum Award by the Building and Construction Authority (BCA) of Singapore. It has also received the prestigious Excellence Award under the Shopping Mall Category in the Businesses for Families Council's (BFC) 'We Welcome Families' Awards 2011. In May 2011, the mall received two additional awards – the FuturArc Green Leadership Award 2011 for Commercial Architecture and the FIABCI Prix d'Excellence Awards 2011 (runner-up in the Retail category).

### Measures taken to reduce waste

In February 2011, CDL strategically placed 10 recycling bins within the City Square Mall and its urban park to provide a convenient means for shoppers to recycle waste. The mall also has a dedicated recycling point for tenants to recycle printer cartridges, cooking oil, batteries, plastics and metals. Annually, the mall collects an estimated 108 tons of paper waste, an estimated 4.8 tons of glass waste and 6 tons of plastics waste which are sent for recycling.

### OTHER ENVIRONMENTAL INITIATIVES

- The "Eco-trails for Schools" programme is regularly organized for students, where students are taken on guided tours around City Square Mall to learn about its eco-friendly features. Since the mall's opening in 2009, over 7,000 primary and secondary school students around Singapore have taken part in the eco-trail programme, which promotes personal responsibility and encourages students to adopt clean and green lifestyles.
- Earlier this year, City Square Mall initiated a programme to encourage its food and beverage tenants to recycle their used cooking oil.



Recycling bins within City Square Mall (top) and its urban park (bottom)



## CROWN Beverage Cans Singapore Pte Ltd

**3R** PACKAGING  
AWARDS  
2011

**C**ROWN Beverage Cans Singapore Pte Ltd is a subsidiary of Crown Holdings, Inc. (Crown) ([www.crowncork.com](http://www.crowncork.com)), a leading supplier of metal packaging products worldwide. Crown is the only aluminum beverage can manufacturer in Singapore and the company supplies both local and international beverage brands.

Crown is committed to continuous improvement in product design and manufacturing practices to provide better outcomes for the human and natural environment both now and into the future. As a global leader in the metal packaging industry, Crown has helped lead the way in reducing the amount of metal necessary to manufacture consumer packaging, improving productivity, developing new manufacturing processes, raising packaging performance standards, increasing functionality, and improving safety throughout its operations. This has enabled the company to reduce the amount of energy, water and other resources and associated emissions necessary to manufacture metal containers and ends.

### Measures taken to reduce packaging waste

In December 2010, Crown reduced the thickness of the aluminium material used in the production of beverage cans, without altering the properties or performance of the container. By utilizing thinner aluminium material and implementing other initiatives, Crown has eliminated more than 100 tons of manufacturing waste annually. Crown remains committed to continuous reduction in the years ahead.

Crown has also worked closely with its aluminium suppliers to review transport packaging methods and identify ways to further reduce packaging waste.

For example, one supplier wrapped non-recyclable hollow plastic boards around rolls of raw aluminium for protection during transport.

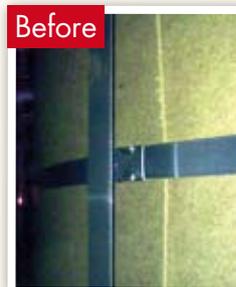
As of December 2010, these protective plastic boards have been replaced with recyclable stretch wrap film. In addition to offering full protection, the film allows Crown to eliminate an estimated 1.06 tons of plastic board waste annually.

In January 2011, Crown worked with another aluminium supplier to improve its transport packaging process. The supplier was using 2mm thick hard boards and 25mm steel straps to protect and hold rolls of raw aluminium together during transport. The hard board and steel straps have since been replaced with 1mm thick wax coated paperboard and 18mm plastic straps.

The new transport packaging not only protects the aluminium from damage, but also enhances handling safety for Crown employees. In addition, switching to the new transport packaging material will help Crown reduce an estimated 0.8 ton of paper packaging waste and 0.4 ton of metal packaging waste annually.



*A typical Crown Beverage Can*



*Hard board and steel straps used as protective packaging*



*Wax coated paper board and plastic straps used as protective packaging*



## Nestlé Singapore Pte Ltd

3R PACKAGING AWARDS  
2011

Nestlé Singapore (Pte) Ltd is a wholly owned subsidiary of Nestlé SA, headquartered in Vevey, Switzerland. Nestlé started its operations in Singapore in 1912 and its brands include MILO, NESCAFÉ, MAGGI, Nestlé Nesvita Omega plus Acticol, KIT KAT, PURINA, FRISKIES, etc.

One of pioneer companies to sign the Singapore Packaging Agreement, Nestlé is committed to finding new ways to reduce the environmental impact of packaging without affecting the safety, quality or consumer acceptance of its products.

### Measures taken to reduce packaging waste

In May 2011, Nestlé embarked on a project to reduce packaging wastage from the production process of its MILO® 3-in-1 sachets. Nestlé found that, by increasing the length of laminate packaging per reel, it could lower the frequency of changeover of laminate reels required in the production process. Some laminate material is inevitably lost each time there is a changeover of reels, so reducing the frequency of changeovers would help reduce laminate wastage. The successful implementation in July 2011 of an increase in the laminate length per reel by about 33%, is projected to help prevent an estimated 1.4 tons of laminate losses annually.

Around the same time, Nestlé explored the feasibility to cut down laminate material usage of its MILO® Hot Mix vending pouch, a pouch specially designed for use with drink vending machines, and its 900g MILO® powder refill pouch for refill into MILO® tin cans.

After conducting trials to ensure that the pouch integrity would not be compromised, Nestlé reduced the height of its MILO® Hot Mix vending pouch from 320 mm to 315 mm. The company also reduced its 900 g MILO® refill pouch from 315 mm to 310 mm. The shorter pouches are expected to reduce laminate material usage by about 30 tons annually.

The above initiatives are expected to not only help the company to save more than \$13,000 annually on material costs, but also result in more efficient production processes.



Left: Old reel with 1200 m of laminate;  
Right: New reel with 1600 m of laminate



Left: New packaging with 315 mm height;  
Right: Old packaging with 320 mm height

### OTHER ENVIRONMENTAL INITIATIVES

- In June 2011, Nestlé launched an iPhone and Android phone application named "123Recycle", which aims to educate consumers on recycling. Conceptualised by Nestlé and co-developed by Nestlé and Nanyang Polytechnic, the application allows smartphone users to scan the bar code of Nestlé's products with their phones and find out how to recycle the products' packaging, with the help of an advisory provided by the application.
- Nestlé also organises educational activities for its staff to raise their environmental awareness. In celebration of World Environment Day this year, Nestlé organised an outing to the Semakau Landfill, where its factory staff learned about the importance of waste reduction.





## Sunfresh Singapore Pte Ltd

**3R** PACKAGING  
AWARDS  
2011

Sunfresh Singapore Pte Ltd produces blended fruit juices and pure drinking water for the airlines, retail, hotel restaurant and catering sectors throughout South East Asia. The company has greatly expanded over the years since it started business in 1981.

Since joining the Singapore Packaging Agreement in 2007, Sunfresh has been reviewing its production practices to find ways to reduce packaging waste.

### Measures taken to reduce packaging waste

Sunfresh supplies pure drinking water in plastic cups to airlines. In December 2010, Sunfresh reduced the weight of these plastic cups from 4.7 g to 4.4 g, enabling Sunfresh to save an estimated 3.6 tons of plastic packaging annually.

Previously, Sunfresh would use new cardboard paper as a supporting base for transportation of its goods, as well as a secondary cover for its finished products. Since 2010, Sunfresh has been reusing used paper cartons for these purposes, instead of new cardboard paper. These new practices are estimated to help Sunfresh save an estimated 21.7 tons of paper packaging and \$36,000 annually.

In the same year, Sunfresh also started re-using plastic bags from the primary packaging of fruit juice concentrates for the disposal of orange peel and other production waste, avoiding the need for up to 1.7 tons per year of plastic packaging to dispose of production waste and saving the company more than \$6,700 annually.



*Plastic cups*



*Reuse of paper cartons for logistical purposes*



*Reuse of plastic bags for production waste*



## Tetra Pak Jurong Pte Ltd

**3R PACKAGING AWARDS**  
2011

**T**etra Pak develops, manufactures and markets systems for processing, packaging and distribution of food. Tetra Pak began providing carton-packed beverages to Singaporean consumers from as early as 1958. Tetra Pak was then represented in the region through its sales offices. Since 2007, Tetra Pak (Malaysia) Sdn Bhd has been managing the commercial operations for the Malaysia, Singapore and the Philippines markets.

Tetra Pak's current largest packaging material plant in the world is located in Singapore, and is operated by Tetra Pak Jurong Pte Ltd. The production facilities of Tetra Pak Jurong adopts world-class manufacturing practices and ensures that packaging materials produced for food & beverages meet the highest quality, food safety and environmental standards.

### Measures taken to reduce packaging waste

The beverage carton packaging material manufactured at the Jurong plant, is made up of six protective layers consisting of paperboard, polyethylene plastic (PE) and aluminium foil materials. The lamination process is one of the key processes in the manufacture of the beverage carton. In the past year, Tetra Pak undertook several projects that reduced paperboard and PE waste arising from the lamination process.

During the setup of the laminating machine, paperboard material would need to be put through the machine while the machine settings are being optimised. However, the paperboard material used for the setup would end up as waste. Tetra Pak formalised a procedure requiring all its technicians to use scrap paper from printing, for the setup of the laminating machines, instead of new paperboard, thereby avoiding some 140 tons of paper waste per year.

In another initiative, Tetra Pak reviewed the process flow for starting up the laminating machine, and shortened the start-up process by eliminating unnecessary steps and simplifying certain activities. By doing this, Tetra Pak found that it would reduce the amount of PE that would drool away and be wasted while the laminating machine was starting up, by about 38 tons annually.

Tetra Pak also improved the process control of the laminating machines to obtain a more precise control over the amount of PE coating used in the production process. This is expected to not only reduce PE waste by 5.5 tons annually, but also result in a more consistent product quality.

### OTHER ENVIRONMENTAL INITIATIVES

- In 2008, Tetra Pak launched a programme in some schools to encourage students to recycle used beverage cartons. Over the past few years, this programme has expanded and it now covers 100 schools in Singapore, ranging from primary to pre-university level.
- Last year, Tetra Pak sponsored packet drinks in support of recycling campaigns held in Victoria Junior College and Pei Hwa Secondary School. Students were encouraged to recycle as they were given a packet of drink for every five pieces of used beverage cartons returned for recycling.



*Use of scrap paper instead of new paperboard for setting up the laminating machine*



*Reducing PE waste through simplifying and shortening the laminating machine startup process*



MERIT  
AWARD  
WINNERS

## Boncafé International Pte Ltd DELL Global B.V. F&N Foods Pte Ltd

3R PACKAGING  
AWARDS  
2011

### Boncafé International Pte Ltd

Boncafé International Pte Ltd was founded in 1962 and is known for its premium gourmet coffee. Its clientele includes hotels, resorts, airlines, restaurants and foodservice establishments. Boncafé has also made its coffee available to consumers who enjoy their coffee at home and at work.

Boncafé has adopted a green approach in its manufacturing process since the start of 2007. Becoming one of the signatories of the Singapore Packaging Agreement has further motivated the company to constantly look for new ways to reduce, reuse and recycle waste.

### Measure taken to reduce packaging waste

In the past, Boncafé used to package its 200g, 100g & 50g jars of instant coffee in paper carton boxes, for distribution to its corporate clients. However, in 2010, Boncafé switched to carton trays and plastic shrink wrap to pack the products. This will enable Boncafé to save a projected 0.88 ton of paper packaging annually. Although plastic shrink wrap is introduced in the new method of packaging the jars of instant coffee, there is still an overall net reduction of packaging material by approximately 0.65 ton per year.



From paper carton boxes (left) to carton trays with plastic shrink wrap (right)

### DELL Global B.V.

From its beginning as a start-up PC maker in Michael Dell's dormitory room at the University of Texas, Dell has grown to become one of the world's leading technology solution providers. Committed to operating in an environmentally responsible manner in all areas of its business, Dell strives to make its computer systems "green by design", and use environmentally preferable materials in its products and packaging.

### Measure taken to reduce waste

Dell has a deliberate and innovative strategy to increase the sustainability of their packaging, guided by the 3Cs:

1. Cube – How big is the box? Could it be smaller?
2. Content – What is the packaging made of?  
Could it be made of something better?
3. Curb – Is it easily recycled?

More information on Dell's philosophy on sustainable packaging may be found at <http://content.dell.com/us/en/corp/d/corp-comm/earth-products-packaging.aspx>. In the past, Dell followed normal industry practices in the use of foams and large boxes to ship its products to customers. However, since the implementation of the 3C packaging strategy in 2009, Dell has replaced the previously used polyethylene and polystyrene foam packaging for some of its flat panel monitors with a more environmentally friendly material, such as corrugated cardboard with minimum 25% recycled content. Unlike the former foam packaging which would normally be discarded after use, Dell's customers can now recycle the corrugated cardboard cushion packaging, making it easier for them to go green.

Dell has also implemented other initiatives such as reducing the size of the outer carton boxes for its products, as well as eliminating any unnecessary packaging material within the carton boxes.



Old Styrofoam packaging



New corrugated cardboard cushion packaging

### F&N Foods Pte Ltd

A wholly-owned subsidiary of Fraser and Neave Ltd (F&N), F&N Foods is a leading dairy company in Singapore which manufactures markets and distributes a wide range of canned and pasteurised milk, fruit juices, soft drinks in Singapore. Its portfolio of healthy beverages and food products include 100PLUS isotonic drink, F&N MAGNOLIA Milk, F&N FRUIT TREE juices, F&N NUTRISOY, F&N NUTRITEA and F&N SEASONS Asian-inspired drinks and teas, F&N ICE MOUNTAIN water, F&N ALIVE yoghurt, alongside F&N's range of sparkling drinks. Many of these brands are leading brands in their respective categories.

### Measure taken to reduce packaging waste

F&N Foods used to have their ultra-high temperature (UHT) processed milk in full carton boxes. In late July 2010, F&N switched to using carton trays and plastic shrink wrap instead, to pack its UHT milk products. This move has enabled F&N to achieve an overall net reduction of 9.2 tons of packaging material annually, and benefit from a cost savings of \$49,000 per year.



Top: New half tray carton packaging  
Bottom: Old full carton packaging



MERIT  
AWARD  
WINNERS

Ha Li Fa Pte Ltd  
Hock Lian Huat Foodstuff Industry Pte Ltd

3R PACKAGING  
AWARDS  
2011

### Ha Li Fa Pte Ltd

Founded in 1987, Ha Li Fa Pte Ltd has established a strong presence in the industry, offering an extensive range of products such as fish balls, fish cakes, sausages, ham and meat rolls. Through its "BoBo" brand fish balls and fish cakes, Ha Li Fa has gained a significant foothold in the local and international market. With recipes handed down by the founders, the company is guided by its vision of providing products that are of the finest quality and taste.

#### Measure taken to reduce packaging waste

Ha Li Fa uses close to a million pieces of plastic bags every year, in its business operations. In the past, Ha Li Fa would use plastic bags with a thickness of 30 microns to package its products. From June 2011, Ha Li Fa switched to using plastic bags with a thickness of 20 microns. The new bags are about 35% lighter in weight, and are therefore projected to help Ha Li Fa reduce its plastic packaging usage by 0.09 ton per year and save the company about \$8,000 in packaging costs annually.

In May 2011, Ha Li Fa replaced the Styrofoam boxes used during the processing of their products with reusable plastic trays. This has enabled Ha Li Fa to avoid an estimated 0.05 ton of packaging waste annually.

In another initiative, Ha Li Fa worked with its suppliers to replace the wooden pallets previously used for transportation of ingredients to Ha Li Fa's factory, with returnable and more durable plastic pallets. This would allow Ha Li Fa to avoid an estimated 17.7 tons per year of wood packaging waste and save more than \$1,000 in disposal costs annually.



Reusable plastic tray for  
delivery of products



Returnable plastic pallet for  
transportation of ingredients

### Hock Lian Huat Foodstuff Industry Pte Ltd

Hock Lian Huat Foodstuff Industry Pte Ltd is a family owned business manufacturing traditional Chinese food such as "Wu Xiang" (five spiced meat roll) and "Xia Bing" (prawn crackers). It distributes its products locally, to heartland eateries such as hawker centres, coffee shops, food courts and even the night markets.

#### Measure taken to reduce packaging waste

In the past, Hock Lian Huat used conventional plastic paper bags of 20 microns thickness to distribute its products. In 2011, Hock Lian Huat replaced these conventional plastic bags with thinner, environmentally-friendly bags which contain recycled plastic material and have a thickness of 18 microns. This will enable them to avert a projected 0.5 ton of plastic waste annually.



Thinner, environmentally  
friendly bags



MERIT  
AWARD  
WINNERS

## Kentucky Fried Chicken Management Pte Ltd McDonald's Restaurants Pte Ltd

3R PACKAGING  
AWARDS  
2011

### Kentucky Fried Chicken Management Pte Ltd

**K**entucky Fried Chicken Management Pte Ltd (KFC) opened its first restaurant in Somerset Road in 1977. Over the years, KFC has developed into a household name among consumers and it now operates 81 quick service restaurants across Singapore. Apart from its signature Original Recipe fried chicken, KFC also offers a wide range of products from burgers, pancakes for breakfast and egg tarts for all-day snacking.

#### Measures taken to reduce packaging waste

The Zinger was originally packaged in a "Zinger Box" made from foodgrade paperboard (foodboard). Last year, for a two month period from May to July 2010, KFC packaged the Zinger in paper wrappers instead of the Zinger Boxes for a World Cup promotional set meal. In January 2011, KFC once again used paper wrappers for its Zinger in the newly launched Ultimate Filler Box, instead of using Zinger Boxes.

Following the success of the above initiatives, KFC decided to completely discontinue use of the Zinger Box and instead, switched to using thin paper wrappers for all its Zinger, regardless of whether the burgers are ordered a la carte, or as part of set meals. This move is expected to result in an estimated reduction of 23 tons of paper packaging waste and cost savings of \$28,000 per year for KFC.



Old packaging for the Zinger



New packaging for the Zinger

When the Ultimate Filler Box was first introduced as a new menu item early this year, the original dimensions of its foodboard box packaging was 170 mm (length) X 170 mm (width) X 75 mm (height). KFC reviewed the size of its Ultimate Filler Box packaging and found that it could reduce the box height by 1 cm, enabling the set meal items to be packed in a more compact manner. The switch to the shorter boxes in April 2011 is projected to help KFC reduce its usage of foodboard material by about 7.7 tons annually and save \$9,600 per year in packaging costs.



Ultimate Filler Box packaging height has been reduced by 1 cm

### McDonald's Restaurants Pte Ltd

**T**he McDonald's Corporation is one of the world's largest quick service restaurant chains with over 32,000 McDonald's restaurants in more than 100 countries. McDonald's opened its first restaurant in Singapore in 1979 at Liat Towers. Today, there are over 115 McDonald's restaurants across the island serving 5 millions customers every month.

#### Measure taken to reduce packaging waste

In the past, McDonald's had been supplying a salad sauce in aluminium foil sachets as a condiment choice for its customers. With the continual evolution of its menu and condiment choices, McDonald's discontinued the provision of this salad sauce in its restaurants from 1 January 2011, enabling a reduction of some 14.1 tons of aluminium foil packaging waste per annum.



Aluminium foil sachet



MERIT  
AWARD  
WINNERS

## Starlite Printers (Far East) Pte Ltd Thong Siek Food Industry Pte Ltd

3R PACKAGING  
AWARDS  
2011

### Starlite Printers (Far East) Pte Ltd

Starlite Holdings Ltd is a public-listed multinational group of companies which designs and manufactures printed packaging and paper products. Starlite Printers (Far East) Pte Ltd, a subsidiary of Starlite Holdings Ltd, was set up in Singapore in 1989 as the regional centre for the Southeast Asian market. Starlite Printers prints and manufactures high quality paper packaging, labels, manuals and instruction booklets for a wide range of products.

#### Measure taken to reduce packaging waste

In the past, one of Starlite Printers' paper suppliers would separately package each lot of 100 sheets of paper, using brown kraft paper. These packages of paper would be stacked together in a pile and the entire pile would then be further wrapped with plastic packaging. In June 2011, Starlite Printers asked their supplier to eliminate the kraft paper packaging, and simply use plastic shrink wrap to hold the pile of paper together. This is expected to help Starlite Printers reduce paper packaging waste by about 22.5 tons per year.



Kraft paper packaging used to wrap 100 sheets of paper per pack



Removal of kraft paper packaging

#### OTHER ENVIRONMENTAL INITIATIVE

- In August 2010, Starlite Printers conducted a talk for its clients to show them how innovative packaging designs could help cut down material usage and save costs.

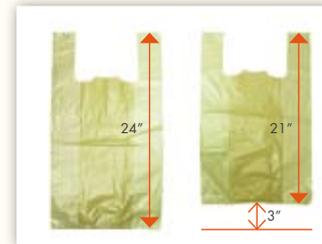
### Thong Siek Food Industry Pte Ltd

With over 30 years of experience in manufacturing fish balls and processed seafood, Thong Siek Food Industry Pte Ltd is now the leading manufacturer, distributor and retailer of 'surimi'-based (Japanese for minced fish paste) seafood products in Singapore.

Apart from supplying its products to many supermarket chains in Singapore, Thong Siek also exports its products to overseas markets including Australia, Mauritius, Sweden, Malaysia, Brunei, the UK, Netherlands, New Zealand, United Arab Emirates, Egypt and the USA.

#### Measures taken to reduce packaging waste

Thong Siek uses more than 470,000 pieces of plain plastic carrier bags each year, for the distribution of its seafood products to retail outlets. In September 2010, Thong Siek switched to smaller plastic carrier bags which are 3 inches shorter in length compared to the plastic bags they had been using previously. The use of smaller bags is projected to cut plastic packaging material usage by about 1.09 tons per year and save the company close to \$4,000 in packaging costs annually.



Original plastic carrier bags  
(20.5" X 24" X 0.03 mm)    New plastic carrier bags  
(20.5" x 21" x 0.03mm)

Since January 2011, Thong Siek has also replaced the high-density polyethylene (HDPE) plastic bags that they had been using for storing fish paste, with bags which are 4 inches shorter in length. By switching from plastic bags with dimensions of 12" x 18" X 0.04 mm to bags of dimensions of 12" x 14" X 0.04 mm, Thong Siek has estimated that it would be able to avoid about 0.21 ton of plastic packaging waste annually, as well as cut annual packaging costs by about \$600.

#### OTHER ENVIRONMENTAL INITIATIVE

- Thong Siek eliminated the use of plastic sheets for covering the yellow containers dedicated for storage of frozen products. This has enabled Thong Siek to avert an estimated 0.32 ton of plastic packaging waste annually.



MERIT  
AWARD  
WINNERS

## Toshiba Asia Pacific Pte Ltd Toshiba TEC Singapore Pte Ltd

3R PACKAGING  
AWARDS  
2011

### Toshiba Asia Pacific Pte Ltd

Toshiba manufactures and markets advanced electronic and electrical products. Toshiba Asia Pacific Pte Ltd (TAPL), the Asia & Oceania regional headquarters under TOSHIBA Japan, has the mission to enhance customer trust in its brands in the market and to support the group companies in the region in environmental management, business planning, public relation advertising, power system, industry division, international procurement, innovation promotion, elevator and human resource and administration.

Toshiba is committed to creating a better environment and a better world for people everywhere, a philosophy summed up in "Toshiba Eco Style". Through "Toshiba Eco Style", Toshiba strives to create eco-conscious products and services for individuals and society.

### Measure taken to reduce waste

Toshiba Asia Pacific Pte Ltd, Toshiba Singapore Pte Ltd and Toshiba Data Dynamics Pte Ltd have teamed up with a local recycler to implement the Toner Cartridges Take-back Programme for its corporate customers. Its customers can now deposit all used toner cartridges, regardless of brand, into collection boxes placed at their own premises. An estimated 3.4 tons of toner cartridges are recycled annually through Toshiba Asia Pacific's toner cartridge take-back programme.



### Toshiba TEC Singapore Pte Ltd

Toshiba TEC Singapore, established on 1 January 1989, provides a wide range of printers, point of sale terminal and information processing systems for use in the retail industry, financial industry and supply chains. It also develops and manufactures dot matrix heads mainly for industrial printing applications.

Toshiba TEC Singapore is certified to ISO 14001 since 1998 and has been working on 3R activities. After joining the Singapore Packaging Agreement in 2010, Toshiba TEC Singapore has explored ways to reduce packaging waste.

### Measure taken to reduce packaging waste

Toshiba TEC Singapore packs most of its products in paper carton boxes, and has been receiving its supply of carton boxes on wooden pallets. To reduce wooden pallet waste, Toshiba TEC Singapore worked with one of its carton box suppliers, to design and fabricate a trolley for carton box delivery, instead of using wooden pallets. It has succeeded with the first trial, which could reduce twice the storage space, compared to when wooden pallets were used.

By getting this supplier to switch to using the fabricated trolleys since 2010, Toshiba TEC Singapore expects to be able to reduce about 1.04 tons of wooden pallet waste annually. An added benefit in the use of the trolleys is that it now requires less time to unload the carton boxes.



Use of fabricated trolley to transport carton boxes, in place of wooden pallets



## Wanin Industries Pte Ltd Winrigo (S) Pte Ltd & Prima Food Pte Ltd Wyeth Nutritionals (Singapore) Pte Ltd

**3R** PACKAGING  
AWARDS  
2011

### Wanin Industries Pte Ltd

Wanin Industries Pte Ltd manufactures and bottles a variety of water products for local and global markets under the flagship brand of Pere Ocean. Currently, Wanin is the only Singaporean-owned water company producing products from its own source of natural mineral water, set in a clean and green environment.

#### Measures taken to reduce packaging waste

Wanin uses plastic bottles to package its natural mineral water products. In 2010, the company reduced the weight of the polyethylene (PE) caps on these plastic bottles by more than 20% per piece, from 2.4g. to 1.8g. The reduction in weight of the PE caps would help Wanin to avert an estimated 10.8 tons of plastic packaging waste annually.



In another initiative, Wanin also reduced the weight of the carton boxes used to pack its bottled water, from 480g to 440g per piece. The 8% reduction in weight of the carton boxes would cut annual paper packaging material usage by about 43.2 tons.

### Winrigo (S) Pte Ltd & Prima Food Pte Ltd

Established since 2001, Winrigo (S) Pte Ltd is one of Singapore's pioneering companies in green technology, specialising in manufacturing eco-products made from waste to new materials. One of the technologies is R3plas Bio-composites (composite material made from recycled plastics reinforced by natural fibres derived from wheat, rice or coconut husks).

In 2010, Winrigo collaborated with Prima Food Pte Ltd (which manages PrimaDeli, Singapore's first home-grown bakery franchise), Spring

Singapore, Singapore Environment Council, Singapore Manufacturers' Federation and the Singapore Institute of Manufacturing Technology to recycle wheat bran, a by-product of Prima Limited's flour milling process, and turn it into biocomposite cake knives and bags for use at the PrimaDeli bakery outlets.

#### Measure taken to reduce waste

As with most bakeries and cake shops, Prima distributes plastic cake knives and plastic bags to customers whenever they purchase cakes, buns and pastries from its PrimaDeli outlets. By replacing the conventional plastic cake knives and plastic bags with the biocomposite cake knives and bags produced from its wheat bran, Prima can reduce its usage of plastic material by about 0.58 ton annually.



The biocomposite cake knife (right) made from recycled plastic reinforced with wheat bran fibres, is 34% lighter in weight than the conventional cake knife (left).

### Wyeth Nutritionals (Singapore) Pte Ltd

Wyeth Nutritionals (Singapore) Pte Ltd first established its presence in Singapore in 1960 and in 2002, Wyeth opened a manufacturing plant in Singapore. Today, the company manufactures and supplies a wide range of formula milk for infants and growing children under brands such as Promil, Progress and Promise, as well as adult nutritional products.

Wyeth is now part of Pfizer, one of the world's largest research-based pharmaceutical companies.

### Measures taken to reduce packaging waste

Wyeth has been reviewing its use of packaging and looking for ways to reduce the material used. Early this year, Wyeth reduced the height of its 900g tin cans used to contain its milk products, from 173mm to 163mm. With the switch to these shorter tin cans, Wyeth expects to not only save 3.5 tons of tin annually, but also save an estimated 0.43 ton of paper per annum since the shorter cans can be transported in smaller corrugated carton boxes.

In another initiative, Wyeth reduced the thickness of the aluminium lids used on its tin cans (easy open ends), from 0.29mm to 0.23mm. This will allow Wyeth to reduce usage of aluminium by about 0.9 ton per year.

Previously, packaging materials for Wyeth's products were supplied in wooden pallets. Due to its porous nature, these wooden pallets are susceptible to pest infestation and cannot be reused. Since July 2010, Wyeth has made it requirement for all its packaging suppliers to use reusable plastic pallets instead of wooden pallets, for the supply of packaging materials to its manufacturing plant. Wyeth even purchased and provided the plastic pallets to its suppliers for this purpose. Replacing the wooden pallets with reusable plastic pallets will not only enable Wyeth to eliminate close to 32 tons of wood packaging waste annually, but also allow for better control of hygiene levels within the manufacturing plant.



The new tin can (left) is 10 mm shorter in height compared to the old tin can (right)



Aluminium lids with reduced thickness of 0.23 mm



## Nestlé Singapore Pte Ltd

**3R** PACKAGING  
AWARDS  
2011

Nestlé has been very proactive in seeking resource-efficient packaging solutions, and has implemented numerous projects in the past few years to reduce packaging waste. Nestlé achieved a significant reduction of packaging waste through these projects, by making improvements to both its production processes and the continuous assessment of packaging used for its products.

In 2009 and 2010, Nestlé implemented the following packaging waste reduction initiatives:

- i. Switched to the use of thinner tin cans for its 1.25 kg and 1.65 kg MILO® pack sizes, which would save an estimated 25 tons of tin per year.
- ii. Modified the production line of its MILO® soft pack to reduce material losses, averting 20 tons of laminate wastage each year.
- iii. Reduced the dimensions of the carton boxes used to pack its MILO® soft packs, enabling a reduction of 20 tons of paper packaging waste annually.
- iv. Reduced the height of the carton boxes used to contain soya products, avoiding an estimated 2.70 tons of paper packaging waste annually.
- v. Reduced the height of the MILO® soft pack from 350 mm to 315 mm, thereby saving 14.4 tons of plastic packaging each year.
- vi. Eliminated the use of paper cartons to pack its MILO® 900 g and 3-in-1 soft packs, enabling Nestlé to save an estimated 4.2 tons of paper packaging annually.
- vii. Reused cocoa powder bulk bag for soya sauce by-product repackaging, avoiding an estimated 1.20 tons of plastic packaging waste annually.



*Use of cartons eliminated*



*Reduced height of MILO® soft pack*



## Sunfresh Singapore Pte Ltd



In line with its firm commitment to the Singapore Packaging Agreement, Sunfresh has been undertaking various measures to cut down on packaging waste. These initiatives not only make a positive impact on the environment, but also help save costs for the company.

In 2009, Sunfresh switched from using used high-density polyethylene (HDPE) instead of polyethylene terephthalate (PET) for its 1-litre and 250 ml bottles. By using PET instead of HDPE, the weight of the bottles could be reduced so that 11.2 tons less plastic packaging material are used annually.

In addition, Sunfresh eliminated the plastic spout caps from the paper cartons used to pack fruit juices, saving about 0.6 ton of plastic material per annum.

Between Jul 2009 and Jul 2010, Sunfresh shifted from using carton boxes to using large carton bins to store its oranges for producing orange juice. This has enabled Sunfresh to significantly cut down the amount of carton boxes used and reduce paper packaging by about 43.1 tons per year.

Around the same period, Sunfresh replaced wooden pallets with more durable plastic pallets for transportation of its products, averting an estimated 8.6 tons of packaging waste annually.

Another environmental initiative taken by Sunfresh involve the reusing of rejected water from its reverse osmosis process to cool its mechanical equipment. The reverse osmosis process filters water to make it potable. This project helps save a projected 1,600 cubic metres of water per annum.



*Carton boxes replaced by carton bins*



*Before*

*After*



PLATINUM  
AWARD  
WINNER

Tetra Pak Jurong Pte Ltd

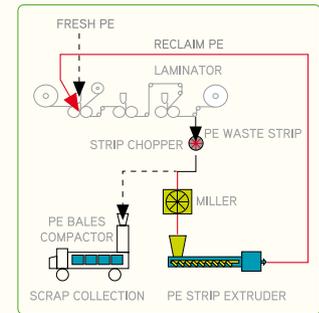
3R PACKAGING  
AWARDS  
2011

Recognizing that it has a significant role to play in protecting the environment, Tetra Pak Jurong Pte Ltd has been continually reviewing and improving its processes for the manufacturing of its beverage carton packaging and has achieved close to 1000 tons in packaging waste reductions annually, since joining the Singapore Packaging Agreement in 2007.

In the last few years, Tetra Pak implemented the following packaging waste reduction initiatives:

- i. Switched to a flying setup process for changing the width of polyethylene (PE) plastic coating, so that the production line would not need to be stopped, thereby reducing about 144 tons of PE waste and 119 tons of paper waste per year.
- ii. Reduced the width of the extra outer plastic coating (PE strip) that is pulled over the edge of the paperboard layer of the beverage carton while it is being laminated – this enabled Tetra Pak to save 35 tons of PE material annually.
- iii. Recovered polyethylene (PE) plastic used to laminate beverage carton packaging for reuse in the packaging production process, enabling plastic waste to be reduced by about 380 tons annually. (See picture on the right.)
- iv. Refined its processes to reduce lamination material wasted during packaging, averting about 75 tons of packaging waste per year.
- v. Implemented processes to reuse into its production line, PE trim from one of its machines – this move reduced plastic waste by 57 tons annually.

Tetra Pak has taken a very active role in educating consumers about used beverage carton recycling. It has been promoting recycling of used beverage cartons to public through events such as NEA's Recycling Week and placing educational messages on buses and train stations. Tetra Pak has also been engaging school children to promote environmental awareness and instil habits of recycling, through its used beverage carton recycling programme in schools.



Recovering PE Trim for Reuse

----- Previous Process  
----- Improved Process



Ha Li Fa Pte Ltd



Plastic-based packaging is most commonly used for Ha Li Fa's seafood based products. Since signing the Singapore Packaging Agreement in 2009, Ha Li Fa has taken steps to reduce, reuse and recycle its packaging materials.

In 2010, Ha Li Fa implemented the use of reusable plastic baskets to hold its products for weighing before packaging, instead of using plastic bags that would be disposed of after a single use. This simple move has enabled Ha Li Fa to reduce an estimated 1.47 tons of plastic packaging waste annually.

Ha Li Fa has also been proactive in raising awareness among its staff on waste minimisation and recycling. For example, Ha Li Fa has set up a collection point within its factory for recyclable waste, as well as a reading area with information on recycling. Ha Li Fa also encourages its staff to use email instead of paper mail to reduce paper waste.



Weighing of products in reusable plastic baskets



## Hock Lian Huat Foodstuff Industry Pte Ltd

**3R** PACKAGING  
AWARDS  
2011

As a manufacturer and distributor of traditional Chinese food, Hock Lian Huat Foodstuff Industry Pte Ltd uses a lot of plastic packaging materials in its daily operation. Hock Lian Huat, however, wanted to do its part to protect the environment, and has therefore been exploring ways to reduce the amount of plastic packaging they use.

In 2009, Hock Lian Huat experimented with the use of plastic bags of different sizes and thickness to see if they could use less packaging material. The company found that it could reduce the size and thickness of the majority of the plastic bags that it had been using, without compromising food safety. Since then, Hock Lian Huat has switched to using smaller and thinner plastic bags, enabling the avoidance of 1.4 tons of plastic packaging waste annually.

In 2010, Hock Lian Huat made another effort to cut down the plastic packaging material used by replacing its double-layered plastic bags with stronger single sheet plastic bags. This has allowed the company to reduce plastic packaging material usage by 0.12 ton per year.

Hock Lian Huat has also implemented several in-house practices to minimise waste such as reusing and then recycling paper, as well as recycling used plastic bottles. In addition, it has been seeking its customers' support in reducing packaging waste by using fewer plastic bags whenever they purchase its products.

On top of the above waste reduction initiatives, the company has also been reminding its employees to conserve energy and water by switching off electrical supplies when not in use and to minimise the amount of water used.



*Smaller plastic bag used*



*Hock Lian Huat traditional chinese food*



## Kentucky Fried Chicken Management Pte Ltd

**3R** PACKAGING  
AWARDS  
2011

Since signing the Singapore Packaging Agreement in 2007, KFC has been regularly reviewing the range of packaging used for its products, and exploring ways to improve its packaging so as to reduce the amount of materials used.

Some of the initiatives that KFC undertook in the past few years to use less material in packaging include:

- i) Reducing the thickness of the napkins from 18.5 gsm to 16.5 gsm, saving about 24 tons of paper material used per year.
- ii) Reducing the thickness of the plastic small take away bag from 18 microns to 15 microns, saving about 2.9 tons of plastic material used per year.
- iii) Reducing the size of the Thrift box used to pack chicken for home delivery from 350 mm x 230 mm x 70 mm to 260 mm x 233 mm x 73 mm enabling a saving of 17 tons of paper material per year.
- iv) Reducing the thickness of its Zinger boxes from 240 gsm to 210 gsm, saving about 5 tons of paper material used per year.
- v) Reducing the thickness of the turnover sleeve packaging for its dessert pies from 240 gsm to 210 gsm, enabling 0.3 ton of paper material to be saved annually.
- vi) Reduced the length of its Dinner box used to pack chicken products for home delivery, from 255mm to 205mm, thus reducing the usage of corrugated board material by 3 tons per annum.
- vii) Reduced the thickness of its half clamshell foodboard box, which serves as a plate for dine-in customers. By reducing the thickness of these boxes from 250 gsm to 210 gsm, KFC was able to cut paper packaging usage by about 12.5 tons per year.



Half clamshell foodboard box with reduced thickness



Packaging with reduced thickness of 210 gsm



## McDonald's Restaurants Pte Ltd



Globally, McDonald's aims for continuous improvement in its efforts to deliver high-quality and safe food products to its customers, while creating a benefit for its employees, the community and the environment.

From 2008, McDonald's introduced self-service Condiment Counters with 'sauce pumps' in its restaurants in Singapore so that its customers could help themselves to the chilli sauce and tomato ketchup. With these Condiment Counters in place, McDonald's could stop distributing chilli sauce and ketchup sachets with every menu order over the counter, thereby reducing about 25 tons of aluminium foil packaging waste per year.

In 2010, McDonald's reduced the length and weight of the plastic spoons provided for its McFlurry dessert, enabling the company to avert an estimated 8 tons of plastic waste annually.

Other initiatives undertaken by the McDonald's restaurants in Singapore to help protect the environment include switching from the use of napkins made from virgin paper to those made from recycled paper, and putting up display signages at the self-service Condiment Counters to remind customers to avoid wastage of napkins and sauces by taking only what they need.



*McDonald's self-service Condiment Counter*



## Starlite Printers (Far East) Pte Ltd

**3R** PACKAGING  
AWARDS  
2011

Starlite Printers (Far East) Pte Ltd is committed to conducting its business in an ethical, socially responsible and environmentally sustainable manner. Being a signatory of the Singapore Packaging Agreement, Starlite Printers seeks to continuously find ways to conserve resources and reduce waste.

In 2010, Starlite Printers established its own ink production team to mix coloured inks from basic colours to suit their needs, instead of purchasing a variety of coloured inks. This initiative enabled the company to reduce wastage of coloured inks and their accompanying tin packaging, enabling the company to avoid an estimated 0.67 ton of metal packaging waste per year.

Starlite Printers has also found that small yet practical changes to their day-to-day business operations can help reduce waste. For example, by switching to the use of hard disks to back up their data instead of CDs, Starlite Printers would avoid the use of some 0.12 ton of CDs annually. In addition, by transmitting and receiving all facsimile documents electronically in softcopy, unnecessary printouts could be eliminated, thereby saving the company an estimated 0.11 ton of paper annually.

Besides implementing initiatives to reduce waste, Starlite has also undertaken a study to provide adequate lighting for its working environment, allowing the company to use 311 less fluorescent light tubes. Timers were also installed for its air-conditioners to switch off based on production working hours. These environmental initiatives have helped the company to reduce its energy consumption by an estimated 9,000 kWh annually.



*Tins of different coloured inks that were previously used at Starlite Printers*



## Thong Siek Food Industry Pte Ltd

**3R** PACKAGING  
AWARDS  
2011

Since signing the Singapore Packaging Agreement, Thong Siek Food Industry Pte Ltd has been assessing its packaging material usage and exploring ways to reduce packaging waste without affecting its product quality and safety.

Thong Siek's fresh fish balls used to be packed in 0.06 mm thick low-density polyethylene (LDPE) plastic bags. However, since September 2009, Thong Siek has been packing its fish balls in plastic bags which are 0.04 mm thick. This has enabled Thong Siek to avert an estimated 1.08 tons of plastic packaging waste annually, and enjoy an annual savings of over \$3,000.

Thong Siek also encourages simple lifestyle adjustments to reduce solid waste. For example, it advocates the use of reusable utensils instead of disposable ones by providing reusable utensils in its office pantry. The company also provides boxes to office staff for the collection of used paper for reuse.



*Products in thinner LDPE Bag*



## Wyeth Nutritionals (Singapore) Pte Ltd

**3R** PACKAGING  
AWARDS  
2011

Wyeth is committed to seeking innovative ways to reduce its packaging waste, and looking for opportunities to recycle waste. Wyeth will continue to integrate environmental sustainability into its business, and realize the vision of "Working together for a healthier world".

In 2009, Wyeth reduced the thickness from 712 gsm to 512 gsm for its shipper cartons used to pack canned products for both local and overseas markets. The shift to thinner carton boxes has enabled Wyeth to reduce paper packaging usage by 165 tons per year.

In 2010, Wyeth started packing its products in-house instead of sending the products in carton boxes to an external service provider to do the packing. This has enabled Wyeth to reduce its usage of paper cartons by 35 tons in a five-month period from February to June 2010.

Wyeth also changed the packaging design for one of its products, shortening the pouch packaging from 230mm to 225mm, and enabling a reduction of plastic laminate material used by 2.7 tons from April to June 2010.

To instil an environmentally-conscious mindset among its staff, Wyeth displays environmental information and educational messages on company notice boards and encourages staff to play their part to protect the environment.



*Reducing the thickness of its shipper carton boxes from 712 gsm to 512 gsm*

# SINGAPORE PACKAGING AGREEMENT GOVERNING BOARD MEMBERS

## CHAIRMAN

Mr Albert Lim

*Chairman*

Packaging Council of Singapore

## DEPUTY CHAIRMAN

Mr Sunny Koh

*Chairman*

Singapore Manufacturers' Federation,  
F&B Industry Group

## Mr Wong Mong Hong

*President*

Singapore Food Manufacturers'  
Association

## Mr Rodney Goh

*Vice President*

Singapore Retail Liquor Shop  
Association

## Mr Eric M Huber

*Factory Manager*

Boncafé International Pte Ltd

## Mr Damir Hlebec

*Supply Chain Director*

Coca-Cola Singapore Beverages  
Pte Ltd

## Mr Victor Chai

*Group Category Manager  
for Housebrand*

NTUC FairPrice Co-operative Ltd

## Mr Tony Loke

*Executive Director*

Prima Food Pte Ltd

## Mr Ong Lye Huat

*Cluster Technical Recycling Manager*

Tetra Pak Jurong Pte Ltd

## Mr Ong Chin Sing

*Chief Operations Officer*

Universal Integrated Corporation  
Consumer Products Pte Ltd (UICCP)

## Mr Koh Kim Hock

*Director-General (Environmental Protection)*

National Environment Agency

## Mr Michael Ho

*2nd Vice Chairman*

Waste Management & Recycling  
Association (WVMRAS)

## Mr Wilson Ang

*President*

Environmental Challenge Organization  
(Singapore)

## Mr Lee Peng Hon

*Director*

Singapore Environment Council

## Dr Lee Hui Mien

*Research Engineer*

Singapore Institute of Manufacturing  
Technology



For more information, please visit:  
[www.nea.gov.sg/SPA](http://www.nea.gov.sg/SPA) or  
email [spa@nea.gov.sg](mailto:spa@nea.gov.sg)

Printed on Recycled Paper