3R Packaging Awards 2008

SINGAPORE PACKAGING AGREEMENT

CONTENTS

3R PACKAGING AWARD WINNERS

FOREWORD

The Singapore Packaging Agreement represents a landmark collaborative effort between the government, industry and NGOs to work towards reducing waste in Singapore. Since the inception of the Agreement, we have witnessed the steadfast commitment of our signatories to reduce packaging waste.

In recognition of our signatories' efforts, we are giving out the 3R Packaging Awards. This Award also marks a new milestone in our journey towards our goal, which can only be realized when companies agree to take up a more pro-active role in reducing, reusing and recycling packaging waste arising from their business activities.

We hope that the Singapore Packaging Agreement will continue to provide a platform for companies to assume greater environmental stewardship for their packaging. Through this programme, we also hope to see the signatories contribute towards educating the consumers, so that they will be able to make informed decisions about consumption, use and recycling of packaging of products.

This booklet on the award recipients carries good examples of measures which companies have undertaken to reduce waste. Many of these waste reduction measures do not just benefit the environment, but the companies' own bottomline as well. I congratulate the recipients of this year's inaugural 3R Packaging Awards, and urge all the signatories to continue to strive hard towards the achievement of the Singapore Packaging Agreement objectives.

Mr Albert Lim
Chairman
Singapore Packaging Agreement Governing Board

INTRODUCTION

On 5 June 2007, a total of 32 organisations from the private, public and NGO sectors came together to sign the Singapore Packaging Agreement, a voluntary commitment to work together over a period of 5 years to reduce packaging waste in Singapore. Three-quarters of the signatories were from the food & beverage and packaging industries.

The Singapore Packaging Agreement came into effect on 1 July 2007 and is non-prescriptive, so as to provide greater flexibility for the industry to adopt cost-effective solutions to reduce packaging waste. A Singapore Packaging Agreement Governing Board, which comprises senior representatives from industry, government and NGOs, oversees and drives the implementation of the Singapore Packaging Agreement programme.

Within the first year of the Agreement, the industry signatories moved quickly to find ways to reduce packaging waste as part of their commitment under the Agreement. Many have implemented changes to their packaging or processes to reduce waste at source; some had even gone one step further and carried out education on packaging waste minimization for their customers.

The 3R Packaging Awards have been developed to give recognition to signatories who have made notable achievements and contributions towards the goals of the Singapore Packaging Agreement. There are two categories of Awards – Distinction and Merit Awards. This booklet features the achievements of the 10 signatories who will receive Distinction and Merit Awards in the inaugural 3R Packaging Awards Ceremony on 3 Nov 2008.

ASIA PACIFIC BREWERIES (SINGAPORE) PTE LTD

Distinction Award

Asia Pacific Breweries Limited (APB), formerly known as Malayan Breweries Limited, was formed in 1931 as a joint venture between Fraser and Neave Group of companies and Heineken NV of Holland. APB's first 100% owned brewery, the now Asia Pacific Breweries (Singapore) Pte Ltd (APBS), was founded in Singapore in 1931. The brewery launched Singapore's very own Tiger Beer the year after and gradually added more beer brands to enhance its product mix to cater to different consumer tastes and preferences.

Today, the brewery adopts the most high-tech brewing process that is almost completely automated from milling right down to fermentation and filtration, with stringent quality control management being carried out at every stage of the brewing process. Besides brewing the gold medal award-winning brew - Tiger Beer, APBS also brews Heineken, ABC Stout, Anchor, Baron's Strong Brew and Guinness Foreign Extra Stout.

Measures to Reduce Packaging Waste

APBS has taken several measures to reduce its packaging waste in Singapore since joining the Singapore Packaging Agreement.

In June 2008, it reduced the Tiger Quart bottle glass weight used in the domestic market from 520g to 500g. This in turn resulted in about 79.8 tons/year of glass packaging material saved.

Since December 2007, the base of the 330ml and 323ml aluminum cans which are used for all brands has been reduced in thickness from 0.285mm to 0.280mm. As millions of cans are sold each year, this change would help to reduce the amount of aluminum packaging material consumed by about 36 tons/year.

By March 2008, all bottle partition boards used for export of canned beer were reduced in weight from the original 600g to 500g. The amount of raw materials used for production is lessened as a result of this measure. In a year, the total amount of paper saved is about 50.4 tons.

These measures potentially help to avert about 166.2 tons of packaging waste per year.

Other Enviromental Initiatives

- APBS switched from the use of 100% virgin Kraft paper to mixed Kraft paper for its corrugated cartons. The mixed Kraft paper is composed of 60% Kraft and 40% recycled paper.
- For more than 30 years, APBS has been operating a voluntary deposit-refund system for encouraging the return of their beer bottles from their distributors and retailers for cleaning and refilling. In the past year, the return rate for their bottles increased to 82.1% as a percentage of bottles sold (up by 0.5% from 2006).

BONCAFÉ INTERNATIONAL PTE LTD

Distinction Award

Boncafé International Pte Ltd has been producing premium gourmet coffee since 1962. Its coffee, in roasted beans and ground form, is distributed all over SE Asia, Sri Lanka, Myanmar, the Maldives, the Philippines, Korea and Japan. As business grew with increasing demand in gourmet beverages, Boncafé saw a 33% increase in usage of packaging material over the past 10 years.

Boncafé has adopted a green approach in every sector of its manufacturing process since the start of 2007. Becoming one of the signatories in the Singapore Packaging Agreement has further motivated the company to move forward in the 3Rs (reducing, reusing, recycling).

Measures to Reduce Packaging Waste

Boncafé's packaging material used for all its gourmet blends comprises layers of polyester, aluminum foil and linear low density polyethylene that amounted to a thickness of 140 microns. Boncafé worked with its material supplier and managed to reduce the thickness of their packaging material from 140 to 120 microns, without compromising on the quality of the packaging. The company also took the opportunity to create a new look for their thinner packaging. Resources were saved as about 14% or 1.5 tons less packaging material would be used per year.

Old Packaging

New Packaging

The filter paper material for the coffee pouch used in brewing coffee in aircrafts also underwent a reduction in thickness. From 25.5gsm it was reduced to 21gsm. This was done without compromising the tensile and wet burst strength of the pouch when coffee in the pouch was brewed within the aircraft while in flight. The reduction in packaging material used amounts to approximately 17.6% or 0.16 tons per year. A side benefit for the company is that this reduction also translated into 7.6% savings for the company and a 13.2% output increase for each kilogram of the packaging material.

Filter Paper Pouch Material

Other Enviromental Initiatives

- By July 2007, Boncafé had replaced all its polyethylene carrier bags and laminated paper bags with more durable woven bags for the delivery of its products. Unlike its predecessors, the woven bags do not deteriorate during storage and can be reused by the customer. This has contributed in a way to help reduce the wastage of carrier bags.
- Wherever possible, Boncafé reuses corrugated carton boxes, and those rendered unusable are collected and recycled. Similarly, wooden pallets from suppliers are often reused.
- Boncafé had set up a booth to educate consumers on reducing packaging waste at the "I'MM Reducing Waste Carnival" held in IMM building in May 2008.

KENTUCKY FRIED CHICKEN MANAGEMENT PTE LTD

Distinction Award

Kentucky Fried Chicken (KFC) was founded by Colonel Harland Sanders, the gentleman who perfected the secret blend of 11 herbs and spices found in the Original Recipe Fried Chicken. Through the years, KFC has developed into a household name among its consumers locally and globally. It offers a wide range of products from chicken-on-the-bone to snackables, salad, toasted range and many others.

KFC Singapore opened its first restaurant in 1977. It now has 73 outlets all over the island.

Measures to Reduce Packaging Waste

As a quick service restaurant, most of KFC's disposable packaging materials are made of paper and plastic. In 2007, it became a signatory of the Singapore Packaging Agreement. This prompted the company to review its range of packaging and to work on finding ways to reduce the amount of materials used, without compromising the quality and shelf life of the products.

KFC makes use of two sizes of boxes for its home delivery: the Dinner and Thrift boxes. KFC has reduced the dimensions of the home delivery Thrift box from 350mm x 230mm x 70mm to 260mm x 233mm x 73mm. This move would help save about 17 metric tons of paper material used per year as well as some $21,000 in terms of material cost. The size reduction of the Thrift box also means that it will take up less space in the delivery bag, allowing more products to fit in.

Old Packaging

New Packaging

In April 2008, the small plastic bags used to pack small items for takeaway also underwent a reduction in thickness, from 18 microns to 15 microns. This 17% decrease in thickness would mean a reduction of about 2.9 metric tons in the amount of plastic packaging material used per year. With this change, the company was able to avoid a cost increase of about $11,500 for 2008 despite the escalating cost of plastic resin.

Other Enviromental Initiatives

- The original thickness of KFC's napkins was18.5gsm. In February 2008, it was reduced to 16.5gsm so that less material could be used while still meeting functional requirements. With the switch to thinner napkins, about 24 metric tons of paper material could be reduced per year.

- KFC has incorporated a theme of "Go Green, Save the Environment" in its "Chicky Goes to School" programme for 2008. Under this programme, KFC's Chicky Club mascot, Chicky, visits 40 primary schools within a year to teach the students to recycle, reduce and reuse materials.

- An estimated 10-15 metric tons of used cooking oil are generated every month at the KFC restaurants. Instead of being discarded, the used oil is collected and sold to companies that conduct research on bio-diesel.

TETRA PAK JURONG PTE LTD

Distinction Award

Tetra Pak, founded in 1951 by Dr Ruben Rausing, is today one of the world's largest suppliers of packaging systems for milk, fruit juices and drinks. The company adopts world-class innovations in its facilities to ensure that food and beverages contained in Tetra Pak packages are safe, and are produced in an environmentally-friendly manner.

One of Tetra Pak's packaging manufacturing material plant in the world is situated in Singapore, in Jurong. The production facilities of Tetra Pak Jurong were built and inaugurated in 1982.

Measures to Reduce Packaging Waste

Tetra Pak has introduced some changes to its beverage carton production processes and implemented projects to reduce waste.

The beverage carton packaging material manufactured at the Jurong plant, is made up of protective layers consisting of paperboard, plastic (polyethylene polymer) and aluminum foil materials. In the previous setup for changing the width of the polymer coating on the packaging material, the line would be stopped before the extruders were moved out of the line. During this time, the polymer would continue to drool away and would be wasted. Since July 2007, Tetra Pak has introduced improvements such that a flying setup is achieved, so that it is no longer necessary to stop the line while making polymer width changes. The result: annual losses of up to 144 tons of polyethylene polymer during setup are avoided. Switching to a flying setup would also help to reduce about 119 tons of paper waste per year.

In another initiative, the polyethylene strip waste was reduced. The polyethylene strip is the extra outer plastic coating that is pulled over the edge of the paperboard layer of the beverage carton while it is being laminated. Since reducing the width of the polyethylene strip from 13mm to 10mm in August 2007, a 23% reduction in polyethylene usage was achieved. This would translate to an estimated reduction of 35 tons of polyethylene used per year.

In addition, wooden pallets used for the export of packaging materials are being progressively replaced with plastic pallets, which are stronger, more durable and resistant to pest infestation.

Other Enviromental Initiatives

- Tetra Pak has been very active in educating consumers on recycling of used beverage cartons at events such as Clean & Green Singapore Schools' Carnival, Recycling Day 2007 and I'MM Reducing Waste Carnival at IMM Building.

- Tetra Pak has also launched beverage carton recycling programmes in schools. For example, Tetra Pak sponsored posters and recycling bins for the launch of beverage carton recycling at Nan Hua High School. The company also worked with public waste collectors Colex and SULO to launch the recycling of beverage cartons in 40 schools in the Jurong sector, and 20 schools in the Tampines-Pasir Ris sector, respectively.

CHINATOWN FOOD CORPORATION PTE LTD

Merit Award

Chinatown Food Corporation manufactures frozen food such as glutinous rice balls and roti prata which are widely distributed in major supermarkets in Singapore, Australia, Canada, United States of America, the European Union and Asia Pacific. Since its incorporation in 1992, the business has already grown by 11 times.

Measures to Reduce Packaging Waste

After signing the Singapore Packaging Agreement in June 2007, the company looked at ways to cut wastage through the reduction of packaging material.

Chinatown Food decided to reduce the thickness of the plastic packaging for its glutinous rice balls and roti prata products, from 70 microns to 60 microns. Measures were taken to ensure that the thinner packaging could withstand freezing temperatures without compromising on the quality of the products. Its customers were informed about the environmental objectives of this move and that lighter or smaller packaging did not mean less value. Production of their products packed in the thinner packaging went into scale after a 3-month trial.

By reducing the thickness of its packaging by 10 microns, the company estimates that it can reduce its usage of packaging material by 8.4 tons each year. With this, they have also experienced a 7% reduction in material cost, which would translate to a projected annual financial savings in excess of $36,000.

F&N COCA-COLA (SINGAPORE) PTE LTD

Merit Award

F&N Coca-Cola (Singapore) Pte Ltd is a fully owned bottling system of The Coca-Cola Company since 1999. Its main business includes the manufacturing and sales of a total beverage portfolio including refreshment brands such as COCA-COLA and SPRITE and non-carbonated beverages like HEAVEN and EARTH tea and MINUTE MAID juices. At The Coca-Cola Company, quality holds great importance. It is evident in its production process up to its packaging, which comes in aluminum cans and PET bottles.

Measures to Reduce Packaging Waste

In 2007, the company reviewed the aluminum can for its sparkling and still drinks which contribute to approximately 75% of the business. After working with suppliers and conducting various tests, the beverage can lid weight was reduced to 3.4g from the original 3.7g. Similarly the can weight was reduced to 10.9g from the original 11.2g. The result of these measures is a reduction of more than 104 tons of aluminum per year.

The next packaging looked into was the PET bottle used for sparkling drinks, which contribute to approximately 25% of the business. After conducting several tests, e.g. quality tests, the weight of the 500ml bottles and 1.5L bottles were reduced by 14% and 8% respectively. Since producing this PET packaging material is energy intensive, cutting down the quantity of material used reduces energy consumption as well as the amount of carbon dioxide (a greenhouse gas) being released into the environment. With millions of cases of canned and bottled drinks produced, these packaging reduction measures could save the company up to $346,000 annually.

McDONALD'S RESTAURANTS PTE LTD

Merit Award

McDonald's was founded by Ray Kroc in 1955, and is today a global brand with more than 30,000 restaurants in over 100 countries. In Singapore, McDonald's opened its doors in 1979, and today, 6,000 employees serve more than 1.2 million customers every week.

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 employees, the communities, biodiversity and the environment.

Measures to Reduce Packaging Waste

Globally, McDonald's makes continuous effort to identify sustainable sources for packaging. For example, 31.5% of packaging material is from recycled paper.

In Singapore, self-service Condiment Counters with 'sauce pumps' have been introduced in almost all McDonald's restaurants. The cessation of distribution of chilli sauce and ketchup sachets with every menu order over the counter has led to an annual reduction of 25 tons of aluminum foil sachet packaging.

Other Enviromental Initiatives

- Recycling of corrugated shipping boxes and used cooking oil in many McDonald's restaurants worldwide, reducing waste by approximately 40%.
- Locally, there has been a major switch from virgin paper napkins to napkins made of recycled paper. This has resulted in an annual reduction of 1,000 tons of virgin paper.
- Signages have been displayed at all self-service Condiment Counters to educate/remind Singaporean customers to consider the environment and take only what (ie. sauces and napkins) is necessary in order to avoid wastage.

NESTLÉ SINGAPORE PTE LTD

Merit Award

Nestlé Singapore Pte Ltd, incorporated in 1912 manufactures products such as Protomalt® malt extract, a key ingredient for MILO® in both powder and liquid formats. The factory in Jurong, Singapore, is the largest producer of Protomalt amongst all Nestlé factories in the world. Protomalt is a key semi-finished product which is used to manufacture MILO and this is exported to countries to all over the world from Australia to Japan and even as far as the Americas.

Measures to Reduce Packaging Waste

Even before signing the Singapore Packaging Agreement in June 2007, Nestlé Singapore has been seeking packaging solutions that could minimize all aspects of packaging waste in the areas of product design, packaging materials specifications and manufacturing control. two major projects in 2007 – the reduction of thickness of the MILO tin cans as well as the thickness of the steel drums for Protomalt.

After conducting several tests and a 3-month trial to ensure that the quality and food safety of the MILO powder would not be compromised, the MILO 1.5kg-size tin cans were reduced in thickness from 0.25mm to 0.22mm. The design of the tin was changed from a 6-bead tin to a 9-bead tin so that the can compression strength would not be adversely affected as a result of the reduced thickness. With the use of these thinner tin cans, Nestlé Singapore expects to save about 9.5 tons of tin in a year.

Nestlé Singapore uses about 50,000 steel drums a year for the transportation of Protomalt to its overseas customers. With recommendations from its supplier, and after carrying out comprehensive trials to ensure that the food safety and quality of the Protomalt would not be jeopardized in any way, Nestlé Singapore reduced the thickness of these 300kg steel drums from 1mm to 0.9mm. This move would help to reduce the annual steel usage by 90 tons.

SUBWAY SINGAPORE DEVELOPMENT PTE LTD

Merit Award

Subway has over 30,000 stores in 88 countries. It is the largest quick service restaurant chain in the U.S. It currently has 52 stores in Singapore; by end of 2008 there will be 60 stores, serving healthier, customized and tasty sandwiches.

Measures to Reduce Packaging Waste

The subwrap is an indispensable piece of packaging that is used for all Subway sandwiches. Its thickness was reduced from 33gsm to 30gsm without affecting its quality or functionality. Approximately 3.5 tons of paper is saved annually as a result.

Subway's cookie bags used to be first packed in brown kraft paper, and then further packed into an outer carton box. The cookie bags are now simply packed in brown kraft paper. It is estimated that a nett weight of 1 ton of packaging waste could be reduced per year by doing away with the carton boxes.

A new rubbish bin which has a separate compartment for glass and plastic bottles, has been installed in the Subway stores at IMM Building and the Singapore Expo. This bin allows both customers and Subway staff to recycle glass and plastic packaging waste. More Subway stores will have these bins.

Other Enviromental Initiatives

- Subway's napkins are made from recycled paper with 60% post consumer recycled content, and is processed chlorine-free with water-based inks.
- Customers are encouraged to reuse their cup when they purchase subsequent cup(s) of soda drinks from the drink dispenser.

SUNFRESH SINGAPORE PTE LTD

Merit Award

Sunfresh entered the fruit juice business in 1981, producing, merchandising and trading blended fruit juices across the Asia Pacific region. Through the years, the company has increased its processing capacity many fold to cater to the growth of consumers with a preference for premium fresh fruit juice. Its success is mainly due to its competence and excellence – from sourcing of raw materials to processing to marketing.

Measures to Reduce Packaging Waste

In line with its firm commitment towards the Singapore Packaging Agreement, Sunfresh has undertaken measures to make a positive impact on the environment.

In the past few years, Sunfresh has been making the switch from corrugated cardboard boxes (which were discarded after one use) to returnable plastic trays, to transport its products. Between June 2007 and March 2008, Sunfresh had decreased the proportion of corrugated cardboard boxes used from 20% to 3%, so that by now, about 97% of all Sunfresh products are supplied in plastic returnable trays. This would result in a projected reduction of approximately 33.8 tons of packaging waste per year and an estimated annual savings in excess of $51,000 for the company.

Returnable Plastic Tray

Sunfresh has also replaced over 90% of its double-walled carton boxes used for export of its products, to single-walled carton boxes. Once a complete switch has been made to single-walled carton boxes, Sunfresh has estimated that it would reduce about 18 tons of paper packaging waste in a year and save more than $23,000.

For more information, please visit www.nea.gov.sg/SPA or email spa@nea.gov.sg

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