RECYCLABLE PLASTIC BOTTLES IN FINLAND

As of 1 January 2008, the range of returnable bottles in Finland was expanded with recyclable plastic deposit bottles.

The recyclable plastic deposit bottle has been included in the current recycling system for beverage containers alongside refillable glass and plastic bottles and beverage cans. However, returned recyclable plastic bottles are not be reused as such – their plastic will be utilised as a raw material for new bottles or other packaging.

DRINKS PACKAGING TAX

In accordance with a government decision in Finland, the drinks packaging tax on beverage packaging reutilised as raw material was abolished on 1 January 2008. The decision aims to ensure open competition and free entry onto the market. Upon abolition of the tax, refillable beverage containers, cans and recyclable deposit bottles will be subject to the same terms and conditions of taxation.

The surtax on beverage cans reutilised as raw material was halved to 8.5 cents per litre in 2005. The supplementary tax on refillable beverage containers was done away with earlier. Non-deposit beverage containers outside the scope of the recycling system will continue to be taxed at a rate of 51 cents per litre.

REFILLABLE BOTTLES, RECYCLABLE PLASTIC BOTTLES AND CANS

Refillable bottles are reused as they are; they are collected and returned, washed and refilled. Glass bottles are refilled an average of 33 times and plastic bottles 18 times. The return rate of refillable bottles is 98%, which is at the top end in international comparisons. The use and recycling of



refillable bottles in Finland is administered by the Ekopullo Association.

Deposit beverage cans came on the Finnish market in 1996. Returned aluminium cans are melted down and the aluminium is used to manufacture new cans. The manufacture of reused cans is beneficial as it only requires 5% of the energy necessary to produce a new can. Aluminium can be used repeatedly. The return rate of cans comes to around 90%. Suomen Palautuspakkaus Oy (PALPA) manages the return of deposit beverage cans in Finland.

Recyclable plastic bottles came on the market at the start of this year. Recyclable plastic deposit bottles are collected for recovery in the same way as other beverage containers have been so far. However, returned recyclable plastic bottles will not be reused as they are; rather, the plastic in them will be reutilised. PALPA will manage recyclable plastic bottles.

WHY HAVE RECYCLABLE PLASTIC BOTTLES?

Recyclable plastic bottles are manufactured from polyethylene terephthalate (PET). PET is light, chemically durable and fully recyclable. PET plastic is commonly used as a packaging material for the foodstuff industry and other industries. Recyclable plastic bottles come into being only on the beverage packaging line where the bottle is blow moulded into shape from preforms or bottle blanks, thus the consumer always gets a new bottle.

The introduction of recyclable plastic bottles gives consumers a wider variety of options, and they will always get their drinks in new containers. PET plastic can be used to make bottles of different sizes and shapes. The range is expanding and the consumer will be able to choose the best suited container according to the situation and purpose of use. Recyclable bottles are made from thinner plastic than refillable bottles, thus making them lighter.

Traders have been hoping for recyclable plastic bottles because they will ease return logistics for beverage containers and free up storage space that previously had been set aside for empty refillable bottles.

Recyclable plastic bottles also offer new opportunities for beverage manufacturers. Bottles of different shapes and colours are a means for putting across the message of each brand's attributes more effectively. They also generate innovative shelf prominence in store displays.

Instead of in crates, recyclable plastic bottles are packaged on honeycomb board pallets that serve as transport and sales units. The pallet is convenient for traders and occupies only a small space when empty. In breweries, it allows automated collection in the same way as crates. Honeycomb board pallets have a deposit and will be in the shared use of the industry.

CHANGEOVER ON ENVIRONMENTAL TERMS

The recycling system for beverage containers, which operates at an excellent level in Finland, continues as before with the new recyclable plastic bottles added to the existing system. Several bottles that previously ended up as useless waste now fall within the sphere of recycling.

It is possible to return refillable and recyclable plastic bottles to the same automated redemption machines. Traders have been committed to investing in redemption machines in order to maintain the high return rate of beverage containers.

The returned recyclable plastic bottles are flattened and ground, and the 'flakes' are delivered for reuse. The objective is to utilise, as far as possible, the plastic in recyclable plastic bottles to manufacture new bottles, and the plastic can also be used for other packaging requirements or as a raw material in other industries. PALPA's negotiations concerning the choice of downstream processor for recyclable plastic bottles are nearing completion. PALPA also ensures that the downstream processors commit to handling the material in an environmentally friendly and ethical manner.

The deposit values on recyclable plastic deposit bottles vary from 10, 20 to 40 cents according to the size of the bottle, and the value is marked on the label. Automated redemption machines recognise deposit bottles by reading the EAN code. The requirement for returning the deposit is that the code on the label is undamaged and readable. PALPA started informing consumers about recycling the new recyclable plastic bottles at the beginning of this year.

All beverage packaging is environmentally friendly so long as it is returned to be recycled.

SIX NEW PACKAGING DESIGNS FOR HARTWALL'S BEVERAGE BRANDS

1 January 2008, Hartwall introduced six new design bottles and replaced all its half-litre refillable plastic bottles with recyclable plastic bottles. Hartwall has invested millions of euros to revamp its packaging, but the company will continue to use glass bottles and cans for its beer.

Hartwall is responding to the change on the market by introducing six different design bottles for its beverage brands. The company has been preparing for the change in packaging over a good two years, and it has invested millions of euros in the project.

'The products packaged in Hartwall's recyclable plastic bottles are produced in Lahti. Hartwall Lahti's new production line is ready and production is underway. We have also increased our canning capacity at our Tornio brewery. In all, some 25 million euros of investment has gone into changing over to the new packaging', says Yrjö Närhinen, Hartwall's Managing Director.

Since 1 January 2008, all the spring water bottled at Hartwall Karijoki has also been packaged in recyclable plastic deposit bottles. Lipton Ice Tea and Gatorade sports drinks sold by Hartwall will also come within the system.

STYLISH NEW PACKAGING FROM HARTWALL

Hartwall Jaffa and Pepsi soft drinks, Hartwall Novelle mineral waters, ED energy drinks and Upcider ciders all get their own profile bottle. Moreover, other products will be packaged in the Hartwall profile bottle, which will also make its way onto the market.

'Hartwall is a company of strong brands. Recyclable plastic bottles mean that we can put across the message of our brands' attributes through their packaging and offer even more pleasurable drinking from stylish packaging that is always new', says Yrjö Närhinen.

The new bottles are the outcome of collaboration between Hartwall and industrial designers. The packaging for Hartwall Novelle and ED were designed by Pekka Kumpula, an internationally successful designer from Design Agency Remes & Packart. The shape of the clear Hartwall Novelle bottles imitates the rings in the water after a stone has been thrown in, and the black ED bottle radiates the dynamic and masculine world of energy drinks.

Hartwall Jaffa soft drinks will be packaged in clear bottles, the upper part of which resembles a lemon squeezer. The bottle exudes the fundamental pledge of Hartwall's deliciously fruity Jaffa. The other non-alcoholic beverages will be packaged in a clear simple Hartwall profile bottle. The Cool Grape and Long Gin Grape long drinks will be packaged in brown profile bottles.

The company has revamped the entire range of packaging for the Upcider brand. A green long neck recyclable plastic bottle and green Upcider Natural and Upcider Frozen cans create a cohesive green look. The packaging for Upcider and the Hartwall Jaffa and Hartwall bottles were designed by Design Agency TANGO\.

Pepsi packaging will be going over to the international Grip bottle that has been used elsewhere in the world since 2004. Pepsi Colas will be packaged in clear bottles, and 7Up and Mountain Dew in green bottles.

'Consumers have given our new packaging an excellent reception across the board, and they consider it appealing, distinctive and better than the current containers. Consumers feel they derive clear added value when they always get design instead of a recycled bottle in new packaging,' says Mr Närhinen.

BEER STAYS IN GLASS BOTTLES AND CANS

The 1.5 litre refillable plastic bottle will remain on the market for the time being. The first 1.5 litre recyclable plastic bottle is due to come on the market in spring. However, the recyclable plastic bottle is expected to replace the refillable plastic bottle within the next few years.

The company will continue to use glass bottles and cans for its beer because they are better suited for beer and appreciated by consumers.

"The 0.33 litre glass beer bottle will continue to hold its own because it's popular with consumers. The proportion of beer cans is expected to increase still further, but the tax amendment will also offer scope for new glass containers. Lapin Kulta and Foster's long neck bottles are leading the way here', says Mr. Närhinen.

The increase in cans in the cider and long drink categories is expected to level out along with the launch of the recyclable plastic bottles.

SINEBRYCHOFF INVESTING IN RECYCLABLE PLASTIC BOTTLES - ALSO FOR BEERS

Sinebrychoff has invested substantially in recyclable plastic bottles and is convinced that it will have a positive effect on consumer habits and competitiveness. According to Sinebrychoff the quality of the multi-layered 'armoured plastic' is well suited to beer.

As of January 2008, KOFF beer is also available in reclosable plastic bottles.

An extensive three-year restructuring of production processes at Sinebrychoff's Kerava production facility is









nearing completion. Utilising the opportunities offered by the elimination of the environmental tax on packaging, the company has made a total of EUR 70 million in investments, among the most substantial in the Finnish food industry.

In 2005, a second canning line was taken into use at the brewery; an automated high bay warehouse began operating in 2006, and now in the final stages of assembly are modern recycable plastic bottle production lines that will blow 36,000 bottles from blanks in an hour, or ten bottles per second.

INVESTMENT IN BRANDS

The lightweight, durable, and recyclable plastic bottles are a new packaging alternative for 36 Sinebrychoff products, mainly mineral waters and soft drinks. Recycable plastic bottles will gradually replace the refillable plastic bottles currently in use. In the future as well, there will be three alternatives – glass bottle, can and recycable plastic bottles - utilised for the consumer packaging of many of Sinebrychoff's products. 'In the grocery store sector, there have been pressures to switch to foreign-made thin plastic bottles, because of the space they save and their lighter weight. Now merchants will not have to

utilise foreign thin plastic products, when Finland's market leader is providing a high-quality alternative. We will also use our own bottles and design suiting each beverage to strengthen our product portfolio's brands', says Sinebrychoff's CEO, Mikael Aro.

FINALLY CUSTOMISED FOR BEER

KOFF beer will also be available in recyclable plastic bottles. Finally, a plastic packaging custom made for the lager beer, twice awarded as 'Best in the World' has been found. The multilayered bottle's outermost and innermost layers are PET plastic, with a nylon layer sandwiched in between. The dark brown colour gives the beer UV protection.

'Beer is sensitive to light, air, and heat. We want to maintain KOFF's quality - and quality costs. The bottle we have selected is not a cheap alternative, but it preserves the beer's flavour so well that we can promise six months of preservability. Naturally, glass bottles and cans will remain the primary packages for our beers', states Production Director, Kimmo Jääskeläinen.