



# Sustainability in Practice

## The Soft Drinks Industry Sustainability Strategy: One Year On JUNE 2009

### Introduction

The Soft Drinks Industry Sustainability Strategy was launched by the British Soft Drinks Association in June 2008. The main aim of the Strategy was to set out the industry ambitions and challenges over the next few years, focussing on four key areas:

- Climate Change
- Waste and packaging
- Water
- Transport

The first progress report aims to provide an update on achievements to date through case studies and industry wide progress. It does not seek to be a statistical report, rather to illustrate in practical terms what companies have been doing to meet these objectives and their commitment to improving sustainability.

## Climate Change

**Industry ambition: In line with the aims of the Climate Change Act, it is the sector's ambition to achieve a 30% reduction in CO<sub>2</sub> emissions from manufacturing by 2020 compared to 1990 levels**

The Climate Change Act 2008 set an extremely challenging target for the UK of achieving an 80% carbon reduction by 2050. Improving energy efficiency in manufacturing and the availability of low carbon energy will be paramount in working towards meeting this target.

### Climate Change Agreements

Members will continue to play an active role in Climate Change Agreements through developing and increasing energy saving initiatives and introducing low carbon energy where available. They are currently participating in the consultation to extend Climate Change Agreements to 2017.

In-house bottling increases energy use on site, although emission reductions can be seen further down the supply chain (ie through reduced transport miles). Demands from consumers for preservative-free products are increasing and will result in some products requiring heat treatment. Reducing CO<sub>2</sub> emissions by 30% by 2020 will therefore prove challenging and results in the need for significant investment in low carbon energy. Solar technology, wind energy, combined heat and power, biomass boilers and purchasing on-grid low-carbon energy are some of the options available when looking at ways in which reductions can be made to carbon energy intensive manufacturing.

### A G Barr

A G Barr has submitted a planning application for the erection of a 2MW wind turbine. Subject to approval, this has the potential to generate over 60% of the total electricity for the site at Cumbernauld. This project could reduce annual CO<sub>2</sub> emissions by 2,800 tonnes – equivalent to the CO<sub>2</sub> emissions from a family car driving 12,000,000 miles.

In 2009, A G Barr will commission the installation of a utilities monitoring system at their Cumbernauld manufacturing site. This follows the successful completion of a similar system at the Mansfield factory which has reduced their energy consumption by 7%.

### **Britvic Soft Drinks**

Britvic has achieved a 30% reduction in energy used in manufacturing and just under a 24% reduction in carbon emissions per tonne of product produced since 1997; meaning that they now produce over 45% more product each year using only 1.4% more energy compared to 1997.

Britvic has recently purchased a new range of chillers, all HFC-free and with energy saving functions such as night blinds and energy efficient motors that can save up to 50% of energy compared to traditional chillers. Moving forward, in 2009 they will trial a number of low impact chillers that could potentially reduce energy by a further 25%.

### **GlaxoSmithKline**

GSK intends to install a 'tri-generation' heat and power plant at its Ribena factory in Gloucestershire. As well as producing electricity, the combined gas-powered system will use the energy for heating and cooling.

### **Tropicana (PepsiCo)**

PepsiCo has achieved continued success at its Tropicana Zeebrugge site, which bottles fruit juice for the UK market, delivering energy reductions of 33% since 2004. Zeebrugge's ISO14001-based environmental management system drives continuous improvement, including a targeted investment in heat exchangers, air-conditioning and sterilisation technology. Together, these achieved a 9% reduction in energy per litre in 2008 versus 2007. In addition to energy efficiency improvements the Tropicana site also switched to 100% certified green electricity in 2008, stimulating the demand for renewable energy sources.

A new UK Tropicana Distribution Centre was constructed in Haverhill during 2008. This built sustainability into its design, which included rain-water capture and recycling, the use of recycled materials, double glazed 'suncool' glass to reduce the air-conditioning demand, refrigeration without using green-house gases, and low energy lighting.

BSDA, in collaboration with members, is compiling top energy saving tips for vending machines which are soon to be published on its website. These tips aim to raise awareness of what can be done to increase energy efficiency in the retail sector.

## Carbon Footprinting

The publication of guidance documents on carbon footprint reporting has raised awareness of the need to take a more holistic view of the manufacturing process and enables companies to see what changes will be most beneficial. PAS 2050 provides a method for assessing the greenhouse gas emissions arising from products across their life cycle, from raw materials through manufacture, transport, use and final disposal. The Beverage Industry Sector Guidance for Greenhouse Gas Emission Reporting is also in the process of being completed. This sector specific document will provide an informative guide on producing a carbon footprint report.

Some BSDA members have now published their carbon footprint reports and through these are making changes to their production processes to reduce their overall impact on the environment. BSDA members will continue to look at ways in which their impacts on the environment can be reduced.

### **GlaxoSmithKline (GSK)**

A carbon footprint study of all GSK drinks brands – including Ribena and Lucozade concluded that over 80% of their carbon footprint comes from packaging and ingredients. Through this they have worked with WRAP and RECOUP to move to 100% recycled PET.

The use of rPET reduces CO<sub>2</sub> emissions by an estimated 8,000 tonnes a year, a 60% reduction compared to using virgin PET.

### **Coca-Cola Great Britain and Coca-Cola Enterprises**

Coca-Cola Great Britain (CCGB) and Coca-Cola Enterprises (CCE), working together with the Carbon Trust, have calculated the carbon footprints of 'Coca-Cola', 'diet Coke' and 'Coke Zero', covering the emissions generated from cradle to grave.

The research illustrated that packaging accounts for between 30-70% of the drink's carbon footprint and highlighted the importance of using recycled content and of encouraging recycling post use. A combination of these two factors can decrease the overall carbon footprint of a product by up to 60%.

In addition, energy saving devices are now being used in refrigeration equipment saving 28,000 tonnes of CO<sub>2</sub>. Reductions have also been made to emissions from the transport and delivery fleet, and more recycled content is being used in packaging.

### **Danone Waters (UK & Ireland) Ltd**

Evian has a long experience in protecting water resources, particularly through the protection of the catchment zone that feeds its own spring. In addition, the brand has worked for many years to reduce its environmental impact in terms of energy consumption, packaging and transportation. As a result, by 2011, Evian will have shrunk its carbon footprint by half compared with 2000 levels.

Evian will at the same time develop voluntary initiatives that will absorb the remainder of its carbon footprint, including a partnership with the Ramsar Convention on Wetlands and the International Union for the Conservation of Nature (UCN) to restore wetlands ecosystems and mangrove swamps. By reducing its own emissions and helping to restore wetlands areas that will fix large quantities of CO<sub>2</sub>. Evian will become carbon-neutral from 2011 onwards.

## Waste and Recycling

**Industry ambition: It is the sector's ambition to send zero manufacturing waste to landfill from 2015**

### Diverting Waste from Landfill

BSDA members are continually striving to reduce the amount of waste being sent to landfill by continuing to reduce the amount of material used in packaging and through recycling initiatives.

#### **A G Barr**

By segregating many of their packaging waste streams, A G Barr has managed to divert nearly 83% of their current waste away from landfill during 2008. Last year they continued to reduce the environmental impact of their packaging.

#### **Britvic Soft Drinks**

Britvic has reduced its waste to landfill by 13.8% since last year and waste being recycled is up by 57.3% since 2007. This has been achieved through initiatives to improve waste segregation across all sites.

### Recycling Initiatives

Over the past year, significant achievements have been made in encouraging consumers to be more waste aware through the introduction of recycling on-the-go initiatives. These aim to encourage, and make it easier for, consumers to recycle products when not at home.

#### **Coca-Cola Enterprises**

In 2008, Coca-Cola Enterprises and WRAP launched a new scheme to enable people to recycle away from home, with the UK's first "on-the-go" Recycling Zone.

CCE aims to create 80 Recycling Zones by 2011. Locations will include theme parks, shopping centres, and major international travel hubs.

In partnership with recycling charity, Recoup, the programme will also offer up to 15 days' technical consultancy to each participating location to enable them to adopt best practice for collection and recycling for drinks cans and bottles.

### **GlaxoSmithKline**

As the majority of the firm's drinks sales are made on-the-go, GSK has trialled reverse vending machines in various locations across the country to encourage consumers to recycle whilst away from home. It currently has four in operation, including the Blue Water Shopping Centre in Kent.

According to WRAP's *Local Authority Plastics Collection Survey 2008* nearly 35% of plastic bottles in the household waste stream are now being collected for recycling - whereas in 2001 this figure was just 3%. Although this is a significant increase, there is still a long way to go. Increasing recycling rates is dependant on the material types collected by local authorities, public participation and on manufacturers ensuring that their packaging is recyclable.

## Packaging

### Industry ambition: It is the sector's ambition to contribute to WRAP's objectives by aiming to improve the sustainability of soft drinks packaging

The role of packaging in products has been the subject of continual debate over the past few years. The soft drinks industry is committed to reducing the amount of packaging used and increasing the recycled content of the packaging without compromising the quality of the product it seeks to protect.

RECOUP, in consultation with the BSDA and a number of other organisations, published an updated version of the *Plastics Packaging – Recyclability by Design* guide in 2009. This guidance document takes a realistic view of what is currently achievable in terms of collection, sorting and reprocessing of packaging. It aims to encourage designers to consider recycling possibilities, provide guidelines for those wishing to make their packaging (more) recyclable and aims to ensure that the introduction of new materials into the recycling stream will not compromise already established systems.

#### Courtauld Commitment

To date, six BSDA members have signed up to the Courtauld Commitment, making up nearly one third of the brands/suppliers who have signed up so far. Greencore Group and innocent Drinks are the most recent BSDA members to have signed up. The Courtauld Commitment is a voluntary agreement between WRAP and grocery companies to reduce the amount of packaging and food waste ending up in household bins. In July 2008, WRAP announced that, through its signatories it had achieved the 2008 objective and was on target to meet the 2010 objectives on food and packaging waste.

BSDA Courtauld Commitment Signatories:

- Britvic Soft Drinks
- Danone Waters UK
- innocent Drinks
- Coca-Cola Enterprises
- Greencore Group (UK)
- Nestlé UK

Through this scheme, companies have significantly reduced their packaging waste.

#### Princes

Princes (working with Tesco) has produced lighter and more portable bottle sizes thereby reducing packaging weight and the number of trucks on the road. They have introduced double concentrated squash, effectively halving the amount of squash required. Replacing the 3L bottle with 1.5L has generated a weight saving of 35g (46%) and saves approximately 470 tonnes of plastic per year.

### **Danone Waters (UK & Ireland) Ltd**

Volvic and Evian are to go plastics-neutral in Britain's first ever true "closed loop" plastics recycling initiative. This scheme (endorsed by WRAP) will save 5,000 tonnes of PET plastic from landfill in its first year alone; it will also cut CO<sub>2</sub> production and is a completely sustainable business model for Danone Waters in the UK.

Danone will guarantee the purchase of an equivalent tonnage of used PET bottles and will return that plastic for processing by Danone contractors.

The containers used to transport the compacted bottles down to Dijon in France would otherwise have travelled empty, meaning that the scheme will actually reduce Danone's overall carbon footprint. In fact, the use of rPET significantly reduces the carbon footprint of plastics materials. And, by saving money on virgin PET, Danone will be able to reinvest £250,000 in environmental projects in the first year alone.

### **innocent**

innocent has moved its one litre smoothies into an 8% lighter carton that is fitted with a new no-ring pull closure. This has saved 20 tonnes of plastic a year and around 100 tonnes of carton board a year.

These two improvements have combined to help reduce their carbon footprint by saving around 250 tonnes of CO<sub>2</sub> per year - that's the same as 125,000 shopping trips in the car.

### **A G Barr**

In the coming year A.G.Barr suppliers will be working to reduce the weight of PET used in various bottles. This action could remove 139 tonnes of plastic packaging - the equivalent of some 7.5 million 500ml bottles

They will also be further trialling the introduction of recycled PET on specific products.

### **Greencore Group**

Greencore has two water bottling plants in the UK – one in Scotland and one in Wales. Both these plants have reduced the weight of their plastic 'pre-form' bottles. Last year in Scotland this resulted in reductions of approximately 110 tonnes of PET material.

### **Coca-Cola Enterprises**

The width of the body of Coca-Cola 330ml can has been reduced to 0.097mm (or by 5% in weight); resulting in savings of 78,000 tonnes of CO<sub>2</sub> and 150,000 tonnes of aluminium across Europe each year.

Reductions have also been made to the amount of plastic in Coca-Cola's 500ml carbonated soft drinks bottles leading to a weight reduction of 2 grams and an overall saving of 700 tonnes per year.

Members will continue to look at ways to reduce the impacts of primary, secondary and tertiary packaging.

### **Britvic Soft Drinks**

Over the past two years Britvic has invested more than £5 million in making the packaging of Robinsons brand lighter, saving approximately 1,600 tonnes of plastic per year.

The Robinsons one litre squash bottles have been light-weighted by 2 grams saving 330 tonnes of PET a year. In the Norwich factory the energy needed to make the bottles has been reduced by 5%.

Britvic has reduced the amount of material in the 500ml drench bottle by 4 grams - a reduction of over 17% in bottle packaging.

Approximately 70 tonnes of corrugated board and 89 tonnes of shrink film have also been saved by using returnable-use trade-ready display units and semi-pallets.

Businesses in the UK helped recover seven million tonnes of packaging waste in 2008. The UK also exceeded its EU targets for plastics and glass recycling illustrating that more is still being done to increase recycling in these areas.

Significant improvements have been made to date in increasing the recycled content of plastic bottles, but these improvements rely on a consistent supply of post consumer recycled PET, which is currently not very high. Future improvements are dependent on increased supplies of this material through better kerbside recycling schemes and effective recycling-on-the-go initiatives. WRAP is currently looking at including recycled content in the future Courtauld 2 agreement. Using recycled content does have its benefits, but in some instances can compromise the functionality of the pack. WRAP needs to take this into account when introducing any new agreements.

### **Silver Spring Mineral Water Company**

Silver Spring has helped the Co-operative Group to become the first retailer in the UK to roll out 100% rPET plastic bottles across its entire own-brand range of carbonated drinks and mixers.

The move to 100% rPET plastic bottles for these beverages, along with the retailer's own-label 330ml sports cap juice drinks, will reduce CO<sub>2</sub> emissions by 1,212 tonnes and save 808 tonnes of new plastic from being made per year.

Through their obligations under the Producer Responsibility Regulations 1996, BSDA members have contributed to the £1.5 billion which UK businesses have spent on national recycling and reprocessing activities over the past 10 years. This has resulted in a doubling of the amount of waste recovered and recycled.

## Water

**Industry ambition: It is the sector's ambition to reduce its waste water volumes (ie water not contained in the product) to contribute to a food and drink industry target to reduce water use by 20% by 2020 compared to 2007**

The Federation House Commitment (set up by Envirowise and the FDF) is an agreement by companies in the food and drink industry to reduce their water usage and work towards an overall industry-wide target of 20% reduction in water usage by the year 2020. A number of BSDA members have signed up to this Commitment:

BSDA Federation House Commitment signatories:

- Britvic
- GlaxoSmithKline
- PepsiCo UK
- Coca-Cola Enterprises
- Nestlé UK

The FHC first annual report is due to be published in June and will report on the achievements made in terms of water usage reductions since the start of the commitment in 2008.

### **Nestlé Waters UK**

In bottling water sourced from St Anne's well in Buxton, water usage has been reduced by over 50% in the last three years. Now 1.26l of water is used to produce one litre of Buxton mineral water. These savings have been made through increased efficiencies in the production line.

Nestlé Waters UK has committed to a broad range of sustainability measures. One of which is that their UK businesses would reduce water use by 10% by 2010, against a 2006 baseline. A 20% reduction in water use has already been achieved between 2006-2008.

### **A G Barr**

Since 2004, a 7% reduction in water used to produce each litre of product has been achieved through a variety of changes across all activities.

### **Tropicana (PepsiCo)**

Tropicana's site in Zeebrugge, which bottles fruit juice for the UK market, now uses 50% less water per litre of production than in 2004. In 2008 the Tropicana Zeebrugge site conducted a detailed water map, and developed a tool to drive further efficiency across the operation. The insights gathered, coupled with effective employee engagement, have helped the site deliver consistent water reductions. 2008 initiatives focussed on water recovery and treatment delivered a further 3% reduction on 2007.

### **Britvic Soft Drinks**

Britvic has reduced its overall water-to-product ratio by 17.7% since 2002.

The company has also reduced its effluent-to-consumption ratio by 16.3% in the past year, and by 33% since 2002.

At its Leeds site, which produces bag in box and glass bottles across a range of products, including Pepsi, 7UP, Tango and J20, a series of planned mechanical modifications has meant that it now save 8 million litres of water per year, and with a second stage of improvements to optimise the temperature system, Britvic will be saving 25 million litres per year.

## Transport

**Industry ambition: It is the sector's ambition to contribute to the overall food and drink industry objective to reduce the external impacts of transport by 20% by 2012 compared to 2002 by integrating environmental efficiency techniques in the sector's own transport operations and working with suppliers and customers to address supply chain impacts**

The industry is playing its part in tackling the impact of freight transport and has contributed to the overall FDF industry objective through reducing transport miles, reducing emissions through moving to greener fleets, better route planning, moving to rail and water transport and using local distribution firms.

All these initiatives help to reduce the external impacts of transport in relation to the soft drinks industry.

### **A G Barr**

The centralisation of the direct-to-store sales operation in Scotland has saved 388,000 vehicle miles per year. The customer distribution team has also optimised the miles travelled by the fleet through a re-routing exercise. This, and investment in a transport planning system, has contributed to a 12% reduction in road miles since 2006. With the acquisition of an additional warehouse facility adjacent to the Cumbernauld site, A G Barr estimates that this will save a further 80,000 road miles each year.

A G Barr is trialling and investing in greener technologies. Its fleet replacement programme saw the introduction of 23 vehicles in 2008 which all meet the Euro IV standard, helping to reduce the direct emissions from its fleet.

### **Bottlegreen**

Bottlegreen awarded its outsourced warehousing and UK distribution to an independent transport and logistics company earlier this year. Using a local distribution firm will enable Bottlegreen to save over 30,000 food miles a year.

Since October 2008 all glass has been sourced from the UK, rather than Europe. Using locally sourced materials has saved an estimated 250,000 road miles per year.

### **Nestlé Waters UK**

In the case of Buxton, Nestlé Waters UK has increased the deliveries from the Buxton area from 3% in 2004 to 55% in 2008. This has reduced Buxton's food miles by 20% with a typical bottle of Buxton mineral water only travelling 135 miles to reach customers' delivery points.

### **Coca-Cola Enterprises**

CCE has reduced the carbon footprint of its vehicles through better journey planning and by using smaller vehicles for smaller loads. They are also reducing harmful exhaust emissions by using an exhaust gas treatment system known as Selective Catalytic Reduction.

Working with Tesco and Eddie Stobart Ltd, CCE has ensured the success of a dedicated rail freight route between Tesco's distribution centre in Livingston and the Daventry International Rail Freight terminal. Under this partnership, 10% of the goods on each south-bound journey are made up of products from CCE's East Kilbride manufacturing site, ready for distribution to Tesco stores. In total, the freight train service will replace over 13,000 lorry journeys – equivalent to three million lorry miles every year.

### **Britvic Soft Drinks**

Britvic's core lorry fleet is now Euro V compliant, meeting European standards on air pollutants and improving efficiency. They have saved 511 tonnes of CO<sub>2</sub> per year since last year.

Britvic has also reduced CO<sub>2</sub> emissions from company cars and vans by 40% since 2006 and is currently introducing more energy efficient technical service vehicles which will save 1,000 tonnes of CO<sub>2</sub> over four years.

By working closely with their hauliers and by using planning software to reduce unnecessary stock movements and lorry journeys, they have reduced their product miles by 444,187 miles since last year.

### **Danone Waters UK**

Danone is moving as much freight as possible away from roads and onto rail and water. It has introduced better stock control management to minimise the use of road freight and is using more UK ports than previously to avoid road freight.

By the end of 2008, it estimated that rail use would make up 83% of its food transport miles between factories and warehouses; and 52% for the next leg between its warehouses and customers.

BSDA members will continually strive to reduce road miles through improved vehicle routing; increasing vehicle payloads to reduce the number of vehicle movements; and using local distribution centres.

## Conclusion

This progress report highlights the achievements being made by soft drinks manufacturers to further improve their environmental record and shows that the industry, as a collective, is committed to creating a sustainable future for the soft drinks industry.

As an industry there is more to be done to ensure we live up to the ambitions set out in the sustainability strategy. Encouragingly this report shows the steps already taken to meet the four key industry ambitions and provides a positive path forward for continued progress.

BSDA will continue to monitor the industry's achievements against the goals set out in the Soft Drinks Industry Sustainability Strategy and will publish future annual reports on the progress and achievements made.

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20-22 Stukeley Street  
London WC2B 5LR  
Tel: 020 7430 0356  
Email: [bsda@britishsoftdrinks.com](mailto:bsda@britishsoftdrinks.com)  
Web: [www.britishsoftdrinks.com](http://www.britishsoftdrinks.com)