

How collaboration across the supply chain resulted in a smarter waste collection for Smartwater bottles

# **Collaboration across** the supply chain

To turn liner waste into a valuable resource

Coca-Cola European Partners Plc, Viridor Waste Management Ltd, Avery Dennison Materials Europe B.V. and Polymer Extrusion Technologies (UK) Ltd are working together to ensure that around 70 tonnes of PET liner waste will be recycled this year

Collaboration drives the circular economy and helps to address the resource challenges we face. By working together across the value chain, organisations can turn the crisis of resource scarcity into a business opportunity.

This case study demonstrates how Coca-Cola European Partners (CCEP), Avery Dennison, Viridor and PET UK have worked together to turn label waste into a valuable resource that can be used to make new products.

## The partners

- > Coca-Cola European Partners (CCEP), the world's largest independent Coca-Cola bottler.
- > Avery Dennison, the global leader in labelling and packaging materials and solutions.





#### > Viridor,

one of the UK's leading recycling, resources and renewable energy companies.

vapour distilled water with added electrolytes

600ml

### > PET UK,

one of the UK's leading plastics processors.











# The challenge

CCEP started producing
Smartwater for the UK market
in its factory in Morpeth, Great
Britain, in 2014. It filled around
50 million bottles of Smartwater
during 2015 alone.

During the production of Smartwater a self-adhesive label is applied to the bottles. These labels are carried on a transparent plastic (PET) liner prior to application, which results in waste after the labels are dispensed. In total around 8 tonnes of liner waste is generated for every 10 million bottles of Smartwater produced.

PET liner waste is difficult to handle and used to result in a significant cost for CCEP – in 2015 alone over 40 tonnes of waste was produced, costing  $$\mathfrak{L}8,500$$  in handling and disposal costs.

Importantly, the disposal process did not support the emphasis each organisation places on recycling, sustainability and the circular economy.





# The solution

As part of its commitment to sustainability, Avery Dennison works closely with its customers and their customers' customers to transition the industry from a traditional "take, make, waste" model to a circular economy model.

Avery Dennison approached CCEP with a solution that would allow the siliconised PET liner to be recycled into a useful resource.

This involved collaboration with one of the UK's leading plastics processors, PET UK, located in Dumfries, Scotland.

PET UK shreds and extrudes PET liners into a granulate which then undergoes a special treatment before being used for the production of new PET thermoformable sheets. Instead of PET liners ending up in a general wastedisposal bin, they now become a raw material which can be used in the production of recycled PET resin.

The recycled PET (rPET) resin becomes a feedstock for the production of items such as PET staple fiber, strapping or thermoformable sheets, which are used for the production of trays.

CCEP quickly got on board with the idea and introduced Avery Dennison to Viridor, CCEP's recycling partner. The four organisations worked together to establish how the initiative would work. PET UK visited CCEP's Morpeth factory and began the collection of the rewound PET-liner in November 2015.



## The benefits

This initiative was an important step forward for CCEP, helping it to recycle more of its waste and confirming its commitment to support the circular economy. The initiative is expected to reduce the carbon footprint of CCEP's Morpeth factory by approximately 180-200 tonnes CO2e this year.

The initiative also has a direct commercial benefit for CCEP, which expects to produce 90 million bottles of Smartwater in 2016. Ensuring that the liner can be recycled, instead of being sent for incineration or disposal, is expected to generate an annual saving of around £25,000.

We welcome CCEP as a new member to our PET liner recycling program ""

"Since the launch of this circular service with PET UK in 2014, we signed up numerous wine, spirits, beer and beverage brands, interested in saving costs and reducing the environmental impact of their bottling operations in the UK and Ireland. The enthusiasm and close cooperation between the four companies across the value chain were key to the fast and successful implementation of the service. Avery Dennison set the ambitious sustainability goal for 2025 of eliminating 70% of liner waste from the industry value chain. We hope the case study with CCEP will inspire and encourage other brands to reach out to us and find out what recycling possibilities exist for their liner waste. "

#### Xander van der Vlies.

Sustainability Director for Avery Dennison.



## Transforming waste™

"The project was a great opportunity to work together with suppliers through innovation and continuous improvement to drive down cost and improve service levels for our client Coca-Cola European Partners. Working in collaboration with our customers and suppliers is a key element in our vision to give resources new life and it is important for us to work with them in a way that promotes quality and value and ensures sustainability and innovation. "

## Teresa Etherington,

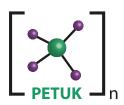
National Key Account Manager at Viridor



"At Coca-Cola European Partners, we are fully aware of the risks and opportunities that resource scarcity poses to our business, in particular for our packaging. We are clear that our economy needs to evolve from the current 'take-make-dispose' model and we need a more circular, longerterm way of thinking. This example shows how we can turn the crisis of resources into a business opportunity through close collaboration across the value chain. Businesses which can be truly innovative with the products and services they provide, optimising the resources they use and encouraging consumers to do the same, have the potential to transform our economy. "

#### Joe Franses,

Director of Corporate Responsibility and Sustainability at Coca-Cola European Partners



"PET UK are pleased to once again bring value to what was previously a waste stream by collaborating with other businesses to help make the transition to a more circular economy. "

### Iain Steel.

Technical Service Manager at PET UK

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