

# Working with PepsiCo and Walkers

## Product carbon footprinting in practice



As the first company to pilot the original method for assessing product carbon footprints and the first to introduce the Carbon Trust Carbon Reduction Label, Walkers offers several important lessons. This experience provided a practical, company-led perspective to inform the development of the footprinting method that became BSI PAS 2050<sup>1</sup> and the Carbon Reduction Label itself. Walkers is also a case study in the power of effective supplier engagement to reduce carbon emissions; the importance of making public commitments to drive real action and results; and provides evidence that carbon footprinting and labelling matter to consumers.

<sup>1</sup> BSI Publicly Available Specification (PAS) 2050 is based on the product carbon footprinting method originally developed by the Carbon Trust and trialled with Walkers, Boots and innocent. The Carbon Trust later co-sponsored, along with the UK Department for Environment, Food and Rural Affairs (Defra), the development of PAS 2050 by BSI British Standards.

# Company background

PepsiCo UK and Ireland is the parent company of Walkers. PepsiCo also owns other leading UK brands including Quaker, Tropicana, Copella and Pepsi. The company employs over 5,500 people across 13 locations around the UK.

The Walkers business includes the largest crisp manufacturing plant in the world, plus several other manufacturing, distribution and corporate sites. Since 2007 Walkers has sourced 100% British potatoes for all its crisps, leading to a supply chain that is concentrated in the UK.

The PepsiCo and Walkers businesses both have strong commitments to sustainability. At the global level PepsiCo has committed to 'performance with purpose', with a sustainability strategy to minimise its use of energy and water; limit packaging and waste; and reduce its carbon footprint around the world.

In the UK, PepsiCo has taken this commitment further by defining three key environmental challenges that pose fundamental questions for society and business: climate change, resource depletion and water use – the areas where it believes it has the greatest ability to act and influence. According to CEO Salman Amin: "Our business relies on a successful society and healthy planet to grow and meet future consumer needs. In time, everything we do needs to be seen through what environmental purpose it serves as much as financial performance".

Walkers has worked with the Carbon Trust on energy efficiency and carbon management since 2002. It has succeeded in reducing energy use in its own operations by more than 30% since 2000. This work also led to better understanding of the drivers of carbon emissions, and to the realisation that its supply chain represents a large source of potential emissions reductions.

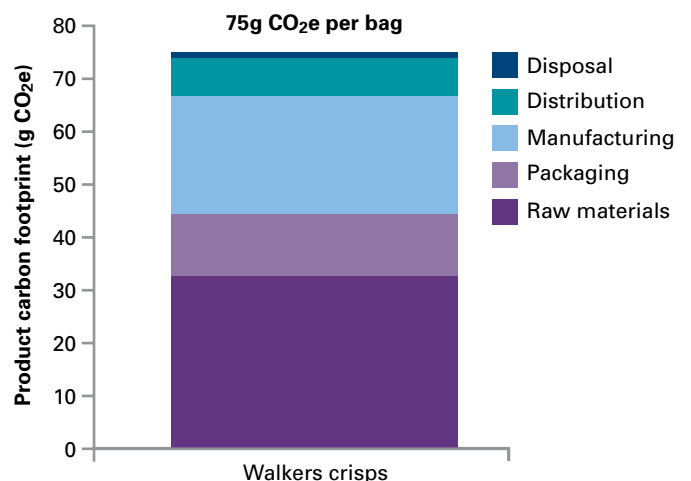
This realisation led Walkers to launch significant work to better understand the carbon impact of its supply chain, including the Carbon Trust initiative to quantify greenhouse gas GHG emissions across product life cycles.

## Supply chain assessment

In late 2006 Walkers became the first pilot company to work with the Carbon Trust to analyse the carbon footprint of a product (crisps) across the entire product life cycle, from raw materials to manufacture and packaging through to disposal of the crisp bag (Chart 1). At the time the method excluded the consumer use phase, but since crisps do not require any energy during consumer storage or consumption, use phase emissions would be negligible.

Walkers and the Carbon Trust's findings confirmed the hypothesis that the majority of Walkers crisps footprint lay outside of its direct control, primarily in raw materials – potatoes, sunflowers and seasoning. This understanding has led to a series of initiatives with suppliers and distributors to identify the root causes of high emissions and opportunities to reduce them.

**Chart 1** Product carbon footprint: Walkers crisps



Richard Evans, Chief Executive of Walkers says: “There is a great opportunity for us to work closely with our suppliers to encourage them to understand and reduce their carbon footprints, and to identify opportunities where we can work together to reduce our collective impact on the environment”.

Walkers did not stop at its upstream partners – it also wanted to engage downstream as well, in particular with consumers directly. It felt the best way to reach consumers was to provide a label in order to:

- Clearly articulate the product’s carbon footprint.
- Demonstrate credibility through the Carbon Trust’s verification of the footprint.
- Make a public commitment to reduce emissions from the current footprint.

As a consequence, Walkers was the first product to display the Carbon Trust Carbon Reduction Label on pack in March 2007.

## Achievements

Walkers has worked hard to identify ways to reduce its direct contribution to greenhouse gas emissions. The product carbon footprinting and labelling exercise resulted in further significant impact. Results particularly worth highlighting are:

- Energy use per kg crisps produced has fallen almost 33%, from 4.6 kWh/kg to 3.1 kWh/kg 2000-2007, achieved through improved shut-down and start-up processes, optimised lighting systems and a range of investments in new technologies.
- PepsiCo UK reduced its overall carbon intensity (CO<sub>2</sub>e per kg of production) by 5.9% during 2007.

In addition to taking responsibility for emissions caused by its own production processes, Walkers is actively engaging with its supply chain partners to identify further emissions reduction opportunities. At the end of 2007 and again in 2008, Walkers brought together key suppliers of raw materials and packaging at a series of Supply Chain Summits. In these meetings, Walkers described the process of product carbon footprinting and why it considers it a priority to help reduce emissions across the supply chain.

The first meeting was primarily to raise awareness and ask for suppliers’ help in conducting product-level footprints in more detail; the second was designed as a workshop where suppliers would report back on their more detailed data collection and analysis, and to set the stage for future brainstorming sessions on ways to reduce emissions.



These Supply Chain Summits demonstrate a key benefit of product carbon footprinting – developing a ‘chain of custody’ whereby every participant across the supply chain takes ownership of (1) calculating their part of the carbon footprint and (2) identifying opportunities to reduce emissions during their ‘custody’ of the product. In this case, one company’s efforts have expanded into seven, as key suppliers joined the effort.

Greater collaboration drives further carbon benefits, as companies work together to brainstorm ways to minimise emissions both within their own activities and across the entire chain. In Walkers’ experience, it helps to engage suppliers if you are a key customer and can leverage a strong relationship. Likewise, it provides an opportunity to improve relationships with suppliers by offering a vehicle to think of ways to improve operations and coordination across the supply chain.

Beyond suppliers, Walkers was able to engage consumers as well through trialling the Carbon Reduction Label (Chart 2). Consumer feedback has been positive, although it also highlights considerable opportunity to build awareness and education.

Initial research<sup>2</sup> suggests high awareness (~80%) and low cynicism of carbon labelling and the Carbon Reduction Label specifically. Consumers are positive and appear to be making use of the information as intended:

- 79% agree with the statement: “it makes me more aware of the environmental impact of the products and services I choose to buy”.
- 71% agree that the Carbon Reduction Label: “helps me to reduce the carbon footprint of my regular shopping items”.

**Chart 2** Walkers crisps Carbon Reduction Label



Scores on both statements have increased ~10 percentage points between July 2007 and February 2008, implying consumer awareness is rising and attitudes towards the Label are increasingly positive.

In addition, consumers said the Carbon Reduction Label improved their perception of Walkers’ brand: 44% of those surveyed say it makes them more positive towards Walkers as a company.

Steve John, Corporate Affairs Director at PepsiCo UK & Ireland, says of the consumer research: “At such an early stage we think these results are encouraging, and suggest that consumers are hungry for more robust information on the carbon impact of the products and services they buy. We believe consumers appreciate our public declarations of our commitment to reduce”.

A summary of the consumer research results can be found at [www.pepsico.co.uk/carbonlabel](http://www.pepsico.co.uk/carbonlabel).

<sup>2</sup> Walkers commissioned customer research after launching the Carbon Reduction Label in July 2007 and again in February 2008 to test consumer reactions to it (Populus Concerned Consumers Survey July 2007; 1,063 adults aged 18+). The research contributed to the company’s understanding of awareness, perception and impact of the Carbon Reduction Label on consumers, and to track changes over time.

## Road ahead

Armed with the experience gained from footprinting and labelling Walkers crisps in the UK, the company is considering how its experiences could be applied to other product lines. PepsiCo is committed to broadening its strategic partnership with the Carbon Trust to extend product footprinting to additional product lines and countries.

In the UK, Quaker is now calculating its product carbon footprint, and will work towards adopting the Carbon Reduction Label. In addition, PepsiCo globally has commissioned research on product footprinting from Columbia University in the US and will participate in WRI/WBCSD's development of international supply chain carbon emissions standards, together with the Carbon Trust.

PepsiCo UK & Ireland has pledged to continue to reduce carbon emissions in its production activities through:

- Converting all energy used in direct operations to renewable sources within 15 years.
- Increasing total share of electricity from renewable sources from 8% to 14% within three years.

- Reducing energy use by a further 20% per kg production within three years.
- Using waste oil from Walkers as a fuel in its distribution fleet.
- Ensuring all manufacturing plants are ISO 14001 accredited by end-2008.

It has also incorporated sustainability criteria into capital expenditure decision making on investments over £2.5m, and it is exploring ways to introduce a sustainability lens into new product development and innovation processes.

During 2009, Walkers and PepsiCo will continue their supplier engagement activities, with the goal of setting shared carbon goals and targets. They will also invest in further research to help farmers reduce emissions through better agricultural and storage practices, including how to reduce soil erosion from potato farming and identifying varieties of potato that can grow using less water.



## Key lessons

The Walkers case offers useful lessons for future carbon footprinting and labelling initiatives:

- Public commitment drives action:
  - Walkers has taken seriously its commitment to reduce its product footprint stating: “a public facing climate commitment forces business decisions to be focused through an environmental lens” as after all “nothing is more public than the front of your packet”.
- Power of profile – choosing a key brand (Walkers), having a senior manager/CEO who is committed to the initiative and a public commitment all contribute to the momentum and focus necessary for a successful footprinting and labelling initiative by engaging employees, suppliers and customers and ensuring results materialise.
- Detailed, product-level carbon analysis helped identify new “hot spots” to reduce emissions across the supply chain.
- Chain-of-custody model helps to achieve high-impact emissions reductions:
  - Understanding that only 30% of its products carbon footprint comes from its own manufacturing processes, Walkers focused its efforts where it could have the greatest impact – on working with suppliers to reduce emissions across the supply chain.
  - An open, participative approach – including sharing information, leading by example and encouraging other businesses to engage in carbon reduction – is critical to achieving collaboration, but it requires considerable trust between supply chain partners.
- Consumers “get it”:
  - Early reactions to the Carbon Reduction Label are positive and driving the right behaviours: consumers feel better able to make informed buying decisions armed with credible carbon information.



- Carbon management can contribute to better business decisions:
  - For the first time business decisions, such as capital investments, are being judged through a ‘carbon lens’ and other sustainability criteria.
  - Projected carbon impacts of different changes/ investments are being used as an important step towards overall ‘carbon governance’. Walkers is measuring the net impact of a number of business decisions on the product footprint – to ensure the overall trend is downwards over time.

Finally, as the first pilot partner Walkers has had considerable impact on the development of the footprinting method and the evolution of the Carbon Trust Carbon Reduction Label.

**The Carbon Trust was set up by Government in 2001 as a private company.**

**Our mission is to accelerate the move to a low carbon economy by working with organisations to reduce carbon emissions and develop commercial low carbon technologies.**

We do this through five complementary business areas:

**Insights** – explains the opportunities surrounding climate change

**Solutions** – delivers carbon reduction solutions

**Innovations** – develops low carbon technologies

**Enterprises** – creates low carbon businesses

**Investments** – finances clean energy businesses.

**[www.carbontrust.co.uk](http://www.carbontrust.co.uk)**

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ACT ON CO<sub>2</sub> is the Government's initiative to help individuals understand and reduce their carbon footprint. Visit <http://actonco2.direct.gov.uk> for more information.

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