



PEPSICO

UK & Ireland

performance
with purpose

WATER
CONSUMPTION

-14.6%



-71%

LANDFILL
WASTE



Environmental sustainability report 2009/10

Path to zero

CARBON
FOOTPRINT

-0.5%



ENERGY
CONSUMPTION

-4.1%



Contents

- 3 President's introduction**
- 4 Progress and pledges**
- 6 Future strategy**
- 8 Fossil fuel free**
Climate change and energy
- 14 Passionate about growing**
Agriculture
- 20 Caring about water**
Water
- 26 Products with purpose**
Products
- 32 Collaborative leadership**
Stakeholder engagement
- 36 Putting environmental sustainability in context**
- 40 Future challenges**
- 41 Basis of reporting**
- 42 PUK 2009 criteria and definitions**
- 46 Assurance statement**

About PepsiCo UK & Ireland



PepsiCo UK & Ireland (PUK) employs over 5,500 people across the UK and Ireland. There are 18 manufacturing, distribution and corporate sites in the UK and Europe, including the largest crisp manufacturing plant in the world, located at Leicester, the Quaker Oats factory at Cupar in Scotland, and Boxford farm, the home of Copella apple juice in Suffolk, and a number of other manufacturing, research and administration sites. Our core brands are Walkers, Quaker, Tropicana and Pepsi – but our business also includes a wide range of other brands, including V Water, Snack a Jacks and Sunbites.

Produced by PUK:



Produced by Britvic: (not yet covered in report)



Scope

PUK is a complex business, making a wide range of products and with supply chains that stretch as far as Brazil. Unless otherwise stated any text or graphics relate to the activities of PUK – not our parent company PepsiCo Inc, other PepsiCo businesses or Britvic plc, which produces, sells and distributes Pepsi, 7UP and a range of other beverages in the UK.

Data reported are based on January–December calendar years, with the majority of data covering 2009. Independent assurance was carried out by "Deloitte LLP ('Deloitte')" on our 2009 data on several of the key metrics. For a more detailed explanation of the scope, boundaries and assurance of this report see pages 41–47.

Our path to zero



Richard Evans
President,
PepsiCo UK & Ireland

In 2008 PepsiCo UK & Ireland published our first series of environmental commitments. We promised short-term action and long-term transformation, inside our business, and as an agent for change across our supply chain and the food and drinks industry. Two years into our commitments we are making real progress – we have reduced our total energy consumption by 7.3%, our landfill waste by 88% and our total water consumption by 14.6%. And, although our business has grown by over 15% in that time, our carbon footprint has fallen by 3.7%.

I'm pleased that amidst the economic challenges presented by the last year, we have delivered good progress against many of our commitments and continued to set a stretching agenda. 2009 was a watershed year and we now know that environmental progress can be delivered even amidst a challenging economic background – sustainability efforts are not just a luxury for when things are going well.

This, our second full Environmental Sustainability Report, shows our progress to date, and maps out our journey towards a long-term transformation. The challenges we have set ourselves for the next decade – making our operations fossil fuel free, our largest factories achieving zero water intake, sending nothing to landfill across our entire supply chain, and making our product packaging from renewable resources – are huge undertakings. They will involve ingenuity, investment, and new areas of business capability.

In addition we have identified two new areas that we need to tackle – agriculture and collaborative leadership. Fundamentally our business relies on agriculture and the potatoes, apples, oranges and oats that nature supplies. We are using our long-term relationships with growers to deliver "50 in 5" – halving the water and carbon impacts of our key crops. We are passionate about growing.

We will also need to show leadership and collaborate with suppliers to reduce their impact, and with others to share knowledge and expertise that will drive greater environmental savings. Our aim is to catalyse change in public policies to set a framework that strips carbon out of the whole economy and encourages pro-environmental behaviours. And, as part of a great global company, we'll need to exchange innovation, ideas and experience with our colleagues around the world. If we can achieve all of this, we will have made good progress towards our ultimate goal: a path to zero environmental impact on and of our business.

This approach is not simply altruism. I am confident of the business case. Building sustainability and health into our corporate DNA creates longer-term strategic advantage. Sustainable businesses can cut costs, drive innovation, reduce risk, and motivate employees. It can help our retail customers and increase consumer loyalty. My challenge, over the next few years, is to truly embed sustainability into every aspect of our strategy and decision-making. On environment, on health, wherever we have the ability to do so. That's a hugely ambitious goal, but it is our responsibility to try.

Performance and progress

Overall performance against pledges



Pledge on track

Pledge fulfilled or is on track. Long-term plans and road map agreed and funding secured.

Partial progress

Short-term plans in place but long-term project funding not secured OR partial progress against pledge metrics.

Limited/no progress

Progress underway but current plans fall substantially short of pledge delivery OR no defined scope or progress toward fulfilling pledge.

Key pledges/ data

2008

2009

Climate change & energy

Fossil Fuel Free in manufacturing and distribution by 2023.

Increase total share of PUK electricity from renewable sources from 8% to 14% by 2010 (2007 baseline).

Reduce energy use by 20% per kg of production from 2010 (2007 baseline).

Replace PUK distribution fleet with latest low emissions vehicles and reduce NOx emissions by 60% by 2018.

Our direct Carbon Footprint.

Our total energy consumption.

Achieve zero water intake at our main manufacturing sites by 2018.

Reduce water use at manufacturing sites by a further 45% per kg of production by 2010.

Total water consumption.

Achieve zero landfill waste across our total supply chain by 2018.

Make all of our packaging renewable, recyclable or compostable by 2018.

We assessed each of our manufacturing sites for their potential to host onsite renewables.

Our Quaker factory in Cupar and two of our European sites supplying the UK business are running on renewable electricity so that we doubled the overall share to **16%**.

We achieved an **11.8%** reduction in 2008 by investing in new technology, reducing our waste and empowering and educating our employees.

46 new lower emission vehicles also enabled us to make a **5%** reduction.

Our footprint was **210,562 CO₂e**, an increase of 0.4% on our 2007 footprint. Carbon intensity fell by 9.5%.

We achieved a 3.3% reduction to **625,585,945 kWh**.

We began development of new technology to extract water embedded in our potatoes.

We achieved a small reduction of **2.1%**, but good progress was made in identifying how we would deliver the pledge.

Total water use increased from 1,564,001,980 litres to **1,692,282.028 litres** or 8.2% in line with an increase in production.

Our initial focus was on our manufacturing sites. We achieved a **39%** reduction in waste to landfill across our own operations.

Initial research on identifying possible solutions was undertaken.

We currently source **4% of our energy from renewable sources**. We have not been able to progress our onsite renewable projects as quickly as we would have liked. A roadmap to deliver this pledge is in place.

Although we are already above our target we are seeking further increases. In 2009, **17.4%** of our electricity was from renewable sources.

We made a further **0.8%** reduction in 2009, bringing the total to 12.5%. We have plans in place to deliver the remaining 7.5% to reach our target.

We replaced 104 vehicles (46% of our fleet) with lower emission models in 2009, we achieved a further **18%** reduction, 22% since 2007.

Improved reporting is responsible for an increase in our footprint of 4.6% to **219,473 CO₂e**. Carbon intensity fell by 2%.

A further 4.1% reduction to **599,963,850 kWh**.

We have successfully trialled technology to extract the water from our potatoes to reuse in the factory. We now hope to take to scale, and share the technology with our developing markets.

A further reduction of **11.2%**, means we have achieved a 14.3% reduction in total since the start of the pledge.

Implementing water saving measures and slightly reduced production enabled us to deliver a 14.6% decrease to **1,444,546,062 litres** and a decrease of 7.6% compared to 2007.

Nine of our manufacturing sites achieved zero waste to landfill during 2009, meaning that we reduced waste to landfill by a further **71%** and 88% since we made the commitment. We will take this experience to our suppliers.

We are trialling new packaging types, such as the FSC paper-based packaging on our Red Sky crisps and researching renewable packaging for Walkers based on potato peelings.

Water

Our total energy consumption.

Achieve zero water intake at our main manufacturing sites by 2018.

Reduce water use at manufacturing sites by a further 45% per kg of production by 2010.

Total water consumption.

Achieve zero landfill waste across our total supply chain by 2018.

Make all of our packaging renewable, recyclable or compostable by 2018.

Products

Future strategy

Our path to zero

The need for decisive action from society to maintain our environmental sustainability is greater than ever.

Successful businesses in the 21st Century will be those that mitigate their environmental impacts, exchange knowledge and ideas with others and have the expertise to adapt to a changing world. This is the aim of our path to zero.

Fossil fuel free



Operations will be fossil fuel free by 2023

Caring about water



Taking our largest manufacturing sites off the water grid by 2018

Passionate about growing



50% reduction in carbon and water use of our key crops by 2015

Collaborative leadership



Catalysing change in supply chain, industry and policy

Products with purpose



Product packaging will be renewable, recyclable or compostable by 2018
Send zero waste to landfill throughout our supply chain by 2018

Our approach

In our first environment report in 2008 we set out the long-term transformational targets that we believe we will need to achieve to ensure that PUK is fit for purpose in the 21st century and beyond. This report shows our progress so far and our plans for the future.

But the process will not end in 2015, by which time we aim to have reduced by 50% the carbon and water impacts of our key crops, or 2018, when we want all of our major manufacturing sites to be off the water grid, and be sending no waste to landfill in our supply chain, or even 2023 when we have pledged to be fossil fuel free.

The targets we have set ourselves are key staging posts in what we call our path to zero – achieving zero environmental impacts on and of our business. Our journey is guided by the following principles: being fossil

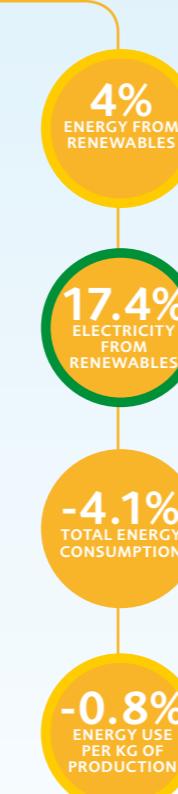
fuel free, caring about water, being passionate about growing, having products with purpose and displaying collaborative leadership. Collectively these priorities require us to tackle the big impacts in our operations, our supply chain and through our products, and they commit us to sharing our knowledge and expertise to be a catalyst for change where it is needed in our industry, in our supply chain, with Government and with anyone else who will join us.

There will be other issues to address alongside those we have already identified, and of course more work to do when we achieve our aims. We will continue to apply our internal knowledge and expertise, and consult widely with expert stakeholders to ensure we are travelling on the right path at the right speed.

Fossil fuel free

Climate change and energy

Decoupling economic growth from increasing carbon emissions means moving away from our dependence on fossil fuels. We need to reduce our energy use in our business, both in our manufacturing (where our carbon footprint is biggest) and in our distribution fleet. Our target is to be fossil fuel free by 2023. It is a deliberately ambitious target that will require further fundamental change of our business and a policy framework that supports investment in low carbon technology and infrastructure. But we believe that achieving it would give us a competitive advantage in an increasingly resource restrained world, as well as fulfilling our commitment to be responsible in this area.



Pledge

All energy used in PUK manufacturing and distribution to be from renewable sources within 15 years.

Progress

Currently 4% of our total energy is from renewable sources, but we have a road map to deliver our pledge.



Increase total share of PUK electricity from renewable sources from 8% to 14% within 3 years.

17.4% of our electricity is now sourced from renewable sources, beating our target.



Reduce PUK energy use by a further 20% per kg of production within 3 years.

During 2009 we struggled to replicate the strong progress made in 2008 reducing our energy use per kg of production by 0.8%. Overall, however, our energy use per kg of production is 12.5% lower than when we made our pledge and we are confident that the plans in place will help us achieve our target.



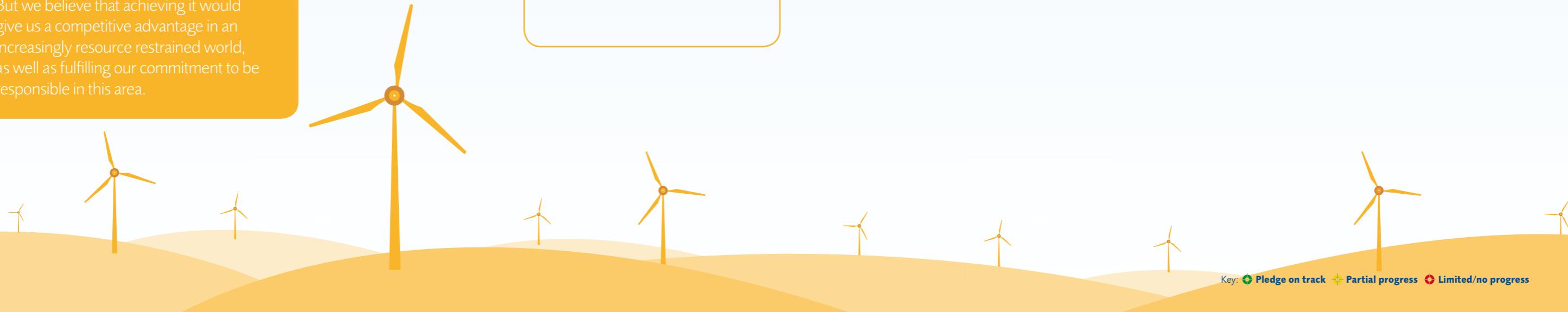
Replace PUK distribution fleet with the latest low-emissions vehicles, and reduce harmful pollutants by 60% within 10 years.

In 2009 we replaced 104 vehicles with the latest low-emissions models, 46% of our distribution fleet. Our fleet now emits 22% less NOx.



Use waste frying oil as a 5% mix biofuel in our distribution fleet.

All waste oil re-used in production of biofuel.



Climate change and our business

The success of PUK as a business is linked to the future of the climate. Changes affect what raw materials we can source and where we can source them from – impacting on the products we produce and the cost of doing so. The long term future of our business demands drastic cuts in greenhouse gas emissions.

We will wean all our manufacturing and distribution sites – our biggest emitters of carbon – off fossil fuels, instead powering them with renewable energy. In 2009 we made steady progress in many areas – increasing the amount of electricity we source from renewables and reducing our absolute energy consumption by 4.1%. But we face difficult challenges ahead, such as shifting more of our energy supply to renewable sources.

(Figure 1) Reducing our carbon footprint

PUK total carbon footprint, year on year % change (2006-09)



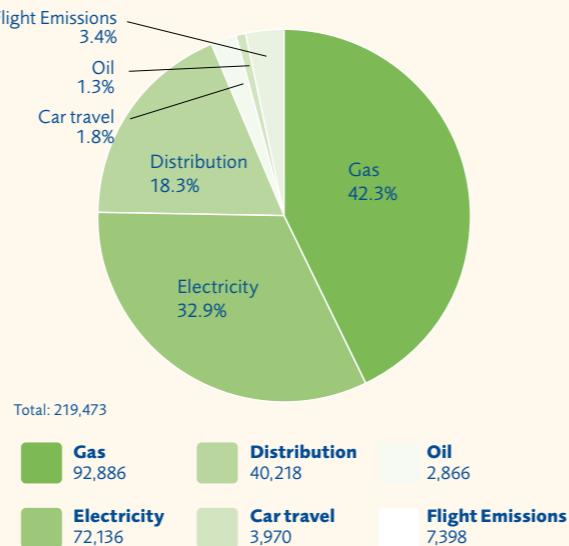
Carbon footprint

Between 2007 and 2009 our comparative carbon footprint fell from 209,797 CO₂e to 201,980 CO₂e, a reduction of 3.7%.

Since 2007, we have increased the scope of our reporting to include employee air travel, two new manufacturing sites, two new distribution centres and some third party logistics – the new scope accounts for 99% of PUK's direct footprint. We are looking at how to include third party emissions such as those of Britvic, who produce and distribute Pepsi, 7UP and other drinks, and our key logistics partner, Culina Logistics, in future footprints to give an even more accurate picture of the impact of our UK business.

Our absolute carbon footprint for 2009 was therefore 219,473 tonnes CO₂e, split up as follows:

(Figure 2) Carbon footprint



Case study

Renewable energy for Quaker



In 2008 we announced plans to build a Combined Heat and Power Biomass boiler at our Quaker Oats factory in Cupar, Scotland. The CHP Biomass boiler is around five times more expensive than a conventional fossil fuel boiler. Using oat husks as fuel, it would have produced enough steam and electricity to power the entire site. We were unable to commission the boiler due to the long-term cost associated with such an investment and the unpredictable financial benefit. Current UK public policy is unclear about the benefits to business of investing in renewable energy generation. Together with the Aldersgate Group we are pressing for a higher price on carbon which will incentivise businesses to invest in renewable technology. See p. 33-34 for more on our position on carbon pricing.

The largest contribution to our carbon footprint continues to be from our manufacturing. Progress on reducing our energy has not been as quick as we would like, in part because of economic and policy barriers to generating on-site renewable energy. Reducing energy in our distribution network will also have an important impact.

Energy use and renewables manufacturing

Since 2006 the trend within our PUK manufacturing sites has been for falling energy consumption despite increased levels of production overall. This was largely due to our significant measures to increase energy efficiency and our gradual shift to renewable sources of energy. While we continue to look for "quick wins" that reduce energy and offer immediate payback, the next stage is to step-change our use of renewable energy, which currently stands at 4% across our manufacturing and distribution networks. 2010 will see our Operations team take many of their new technologies to the next stage of development. We will trial new methods of co-generation and we are also seeking planning permission for a wind turbine at our Skelmersdale site. We are looking at three different options for renewable energy generation – either on-site, off-site or through power partnerships. However, under current legislation we would not receive carbon credits for off-site generation or power partnerships, two of the most commercially viable options. A good way to encourage businesses to use more renewable energy would be to incentivise these options.

(Figure 3) Reducing energy

PUK total energy consumption (mWh) versus total production, year on year % change (2006-2009) based on comparative 2007 baseline data

| | 2007 | 2008 | 2009 |
|--------------------|---------|---------|---------|
| Energy consumption | 646,807 | 625,396 | 599,829 |
| Production | +2.8% | -3.3% | -4.1% |

Energy use and renewables in our distribution network

Through collaboration with our retail customers and suppliers, investment in new fuel technology and continuing efforts to maximise efficiency, we have achieved some quite dramatic reductions in emissions from our distribution fleet – removing nearly 1.5 million miles from UK roads in 2009.

Some of our key initiatives:

Potato haulage – In 2008 we decided to bring potato supply for our Leicester site (the largest crisp manufacturing plant in the world) in house. We invested in a new fleet with a bespoke multi-use trailer design. This meant the same vehicle that delivered packets of crisps from Leicester to our retail customers could also pick up potatoes from our farmers and deliver them to the Leicester site. The new vehicles are a first for the industry and in 2009 took 350,000 miles off UK roads – beating our target of removing 250,000 miles. We expect to remove the same, if not more, number of miles off the road in future years.

Customer collaboration – We began partnering with Asda in 2008 to see whether we shared any distribution routes – with the aim of taking miles off the road, not simply transferring it from one fleet to the other. We soon discovered many possibilities of close collaboration, particularly near our distribution centres in Leicester, Warrington and Peterlee.

By working together and sharing vehicles, we took 333,000 miles off the road in 2008 and 540,000 in 2009.

Oat train – In 2009 Quaker switched more of its freight between Scotland and Leicester to electric rail. Due to the extra capacity on the trains we were able to reduce road miles two-fold. Initially by using rail instead of road and secondly by halving the number of journeys required (due to larger train capacity which allows us to double-stack oat products in the rail containers). In 2010 this took 430,000 miles off UK roads.

PUK people making a difference

"Through partnering with our retail customers we've been able to take thousands of miles off UK roads. The trick to working successfully with our retail customers on these types of issues is to keep the operation as simple and unbureaucratic as possible. Whenever there's a problem, one person from our team calls up someone from their team and it's sorted out then and there keeping communications lines very clear."

Ian Waldron,
Network Planning Manager,
PepsiCo UK & Ireland

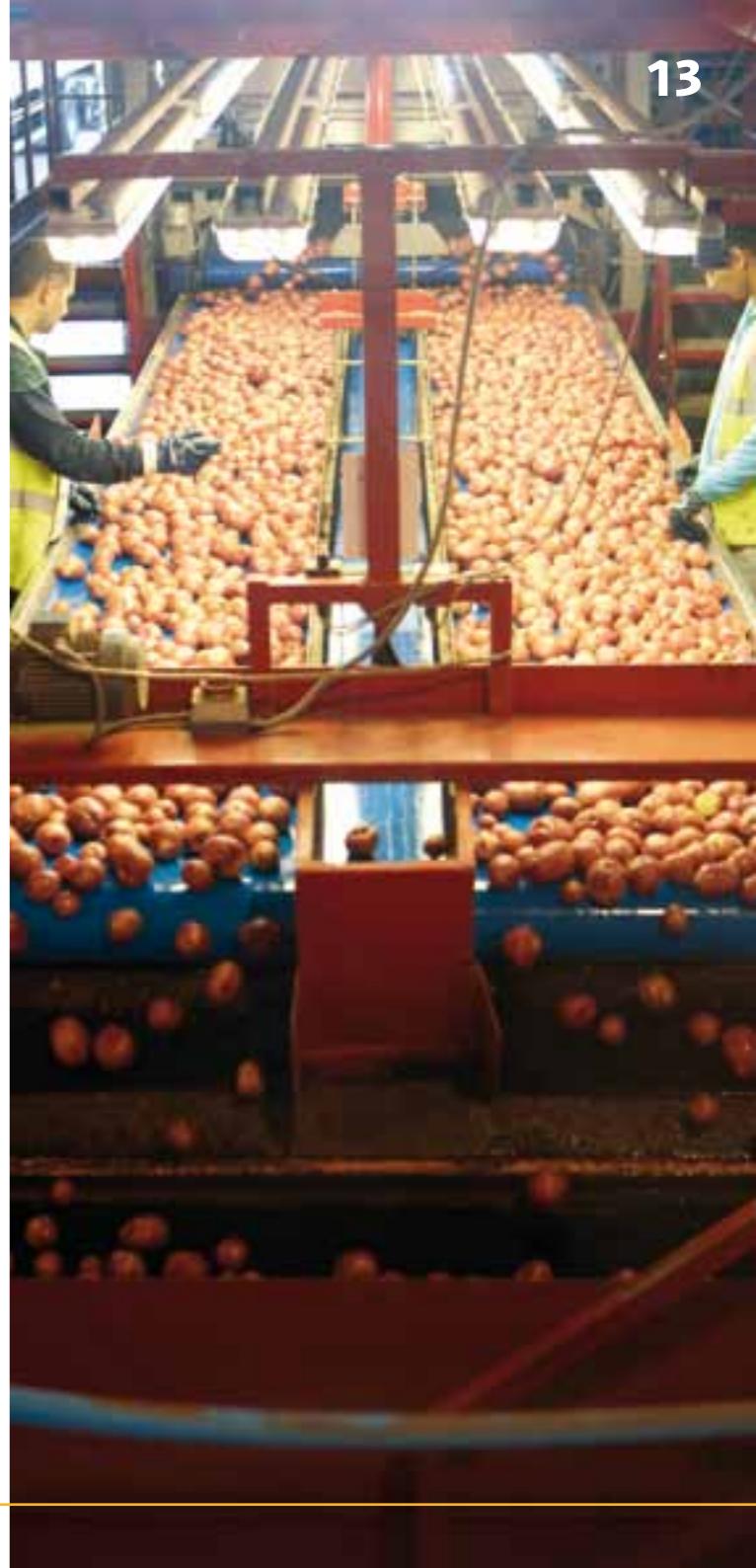


Working with others

We are working with a wide range of partners to understand and reduce our carbon emissions. Elsewhere in this report we detail relationships with our farmers and various organisations to help manage the climate change impacts of our agricultural supply chain. In our own operations, we are sharing expertise with our colleagues around the world on new technologies and approaches which will reduce energy use.

We are also partnering with our customers such as Asda to find efficiencies and common goals to drive change in how we supply our goods. Our work with the Aldersgate Group and others to promote a pro-environment regulatory agenda which will provide the basis for large-scale investment in renewable energy is also set out, as is our continuing partnership with the Carbon Trust to measure and communicate the carbon emissions of our products. We will continue and strengthen all of these relationships.

The Carbon Disclosure Project (CDP) is a valuable partner in understanding and developing our approach by providing a robust and investor-led report of governance, strategy and performance on climate change. We report globally, along with many other of the largest companies, scoring 70 out of 100 on Carbon Disclosure (putting us in the top category of "high" scoring companies) and a B on Carbon Performance (making us a second-tier "fast following" company). We hope to improve both scores in future years to ensure we are in the highest categories for both.



Passionate about growing

Agriculture

Agriculture is at the nexus of some of the key political issues in the 21st Century; from food security, to climate change, to water, to growth in developing countries, to biodiversity, to provenance. It is also fundamental to our business both now, and as we transform to a business based on fruit, vegetables, wholegrain and fibre, even more so in the future.

Many of our products require little alteration of the crops on which they are based. So maintaining a secure and sustainable supply of high quality crops is essential. We will use our knowledge and resources to support our farmers and to tackle the key environmental challenges. We are committed to reducing the carbon and water impacts of our crops by 50% in 5 years. This is what we call being passionate about growing.

Pledge

Commission research on oat and potato agricultural and storage practices to identify further savings in greenhouse gas emissions and water use for Quaker and Walkers.

Progress

We commissioned research and further savings were identified. We are now committed to reducing agriculture carbon emissions of key growers by 50% in 5 years, with improved storage practices as a key component.



Invest in research to identify the most environmentally sensitive ways of irrigating our agricultural raw materials.

We have developed new monitoring technologies and are trialling a water management programme with our key growers. The target is to reduce the applied water impact of our key growers who operate in water stressed areas by 50% in 5 years.



Tropicana to identify action plans for carbon reduction across its whole supply chain.

Tropicana has now mapped its carbon footprint which confirms that the largest emitters of carbon in its supply chain is fertiliser use and cross-Atlantic shipping. Tropicana continues to work with its suppliers to agree a carbon reduction strategy.



New pledges

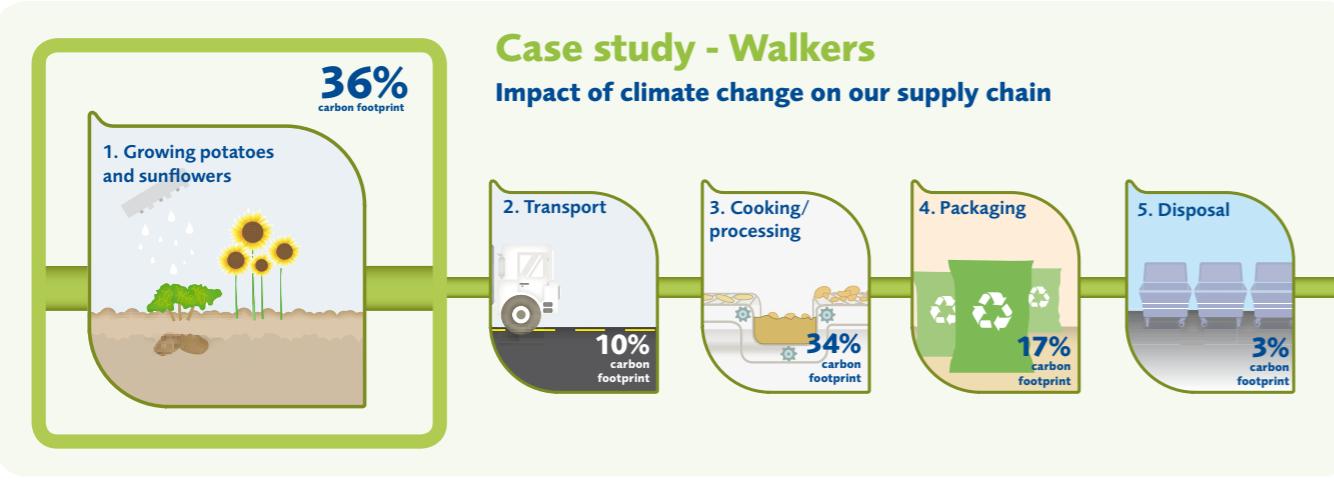
- Work with our UK farmers to achieve a 50% reduction in agricultural carbon emissions of key growers by 2015.
- Work with our UK farmers to achieve a 50% reduction in water impact of key growers who operate in water stressed areas by 2015.
- Replace over 75% of our current potato portfolio with better quality, more sustainable varieties by 2015.
- Invest over £300,000 in research partnerships that develop the technologies and explore the issues that will form the foundations of the sustainable farms of the future.

Agriculture and our business

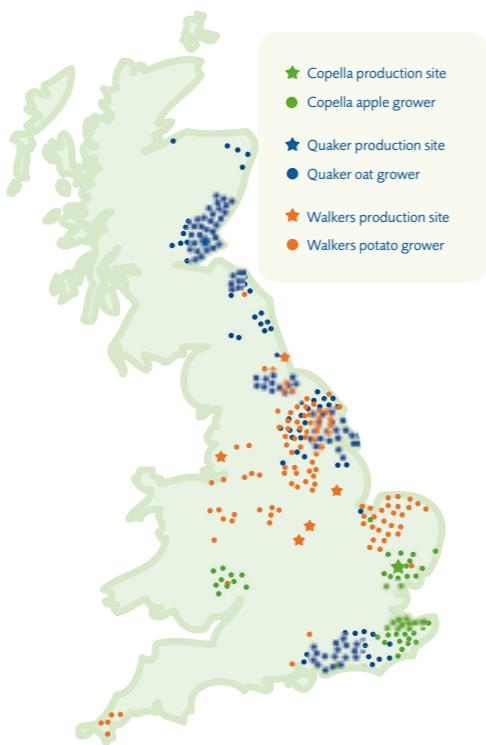
One of the key changes in this report is the emphasis on agriculture. Our success depends on the quality of the raw materials that go into our products, whether it is potatoes, oats and apples from the UK, or oranges from Brazil, Florida and Italy. We also rely on other cereal crops such as corn and maize to make our snacks, sugar for our carbonated drinks and sunseed and other oils for our crisps and snacks.

Our work with the Carbon Trust has also shown that agriculture makes a significant contribution to the overall carbon footprint of our products, around one third of the total (see below). Working with our farmers to tackle the carbon and water impacts of the crops that make our products is a key priority.

Many of our farmers do not need to be persuaded of the need to act as they are already feeling the effects of climate change through unpredictable weather patterns that affect their harvests.



Farms in the UK supplying PepsiCo



50 in 5

Our initial focus is on the key crops we source from the UK: the potatoes, oats and apples which make Walkers Crisps, Quaker Oats and Copella Apple Juice. We will work with our 350 supplier farms to:

- Reduce the carbon impact of our core crops in the UK by 50% over the next 5 years; and
- Reduce the impact of applied water by 50% in 5 years where our farmers operate in water stressed areas.

This will require a combination of partnership, investment and technology, including:

- Applying new technologies, such as our i-crop™ and Cool Farm tools to better measure water impacts and carbon emissions and to help farmers manage their use of water, fertiliser and other inputs more effectively;
- Investing in research to optimise energy efficient storage practices and to identify the most environmentally sensitive ways to grow and irrigate crops. This includes using wind turbines, anaerobic digesters and solar panels to create on-site renewable energy at our farms, trialling new low carbon fertilisers and capturing rainwater to be re-used for irrigation; and
- Replacing 75% of our current potato stock (Saturna, Hermes and Lady Rosetta) with better quality varieties by 2015, aiming to improve yield and decrease waste. We have invested millions of pounds in research over 20 years to find out which varieties of potato provide the best quality and is most sustainable – requiring the least amount of irrigation, highly resistant to diseases, easily stored over longer periods, and crucially, requiring less inputs to produce the same crop yields. Combined, this would mean a high quality potato that requires less water to grow and emits less carbon whilst doing so.



The first phase of our sustainable farming strategy hinges on the i-Crop™ tool which was developed by our agriculture team to help farmers measure their

growth data. The i-Crop™ tool lets farmers measure their water and agricultural inputs and also track resulting carbon emissions. This empowers farmers with the information they need to develop their own sustainability strategies bespoke to their farm.



Full details of our approach can be found in our farming report at www.pepsioco.co.uk/farming



Passionate about growing
PepsiCo UK sustainable farming report 2010



Our global agricultural supply chain

We source the highest quality oranges from Brazil and Florida to make Tropicana Pure Premium orange juice. For our Sanguinello Sicilian Blood Orange variety we source from Sicily – the only location in the world where this unique blood red variant of orange can be grown. It takes considerable expertise to produce oranges of the quality and quantity we require. Citrosuco, our main supplier, is Brazil's leading orange grower and we've been working with them for a number of years. Citrosuco run all of their juicing operations from renewable energy.

The two largest contributors to Tropicana's carbon footprint are the growing of oranges (and particularly the CO₂e emissions from fertiliser use), which accounts for 40% of Tropicana's carbon footprint and emissions from cross-Atlantic shipping – 42% of its overall footprint.

The impact of climate change is also affecting our operations. Poor harvests in Brazil caused by flooding affected the amount of oranges we could source from there, meaning that we had to take a much larger proportion from Florida, a more water scarce area. We are continuing to work with our suppliers to reduce the environmental impact of our oranges.

Dilemma

How do we work with global suppliers to measure and reduce the environmental impact of our key crops grown outside the UK?



Working with others

In order to meet our commitments, we need to work with our farmers, others in our supply chain, in the food industry, the third sector and in Government. We are already engaged in the following partnerships:

- With the **Agricultural Development Advisory Service (ADAS)** we are investigating how to make agricultural practices more sustainable.
- With **Natural England** we are running 2 pilots to investigate biodiversity – one at a potato farm and another at an oat farm.
- As part of our work with the **Sustainable Food Lab** and **Sustainable Agriculture Initiative** we are piloting the Cool Farm Tool at our potato farms.
- The **Carbon Trust** helped us calculate the carbon footprint of Walkers Crisps and Quaker Oats – both of which now feature on-pack.
- Through the **Carbon Disclosure Project** we share carbon emissions data and best practice with the rest of the industry and beyond.
- The **Farm Energy Centre** is helping us develop low-energy storage units.
- We consult with **WWF UK**, the **National Trust** and other leading organisations to ensure our sustainable agriculture strategy is based on the most recent and robust science.

We also want to offer our experience and knowledge more widely – the UK food industry contributes 30% to our national CO₂ emissions, and agriculture accounts for 75% of this. Following the release of our farming report we held a roundtable discussion on delivering a sustainable future for UK agriculture. More information and highlights can be found at www.pepsioco.co.uk/farming.

Case study

Working with academics and our farmers

In 2010 we started to use the Cool Farm Tool (CFT) to measure our agricultural carbon emissions. Developed by the University of Aberdeen and co-funded by PUK, the CFT is a farmer-friendly programme that enables growers to identify and measure on-farm GHG emissions. Importantly it allows modelling to help farmers create carbon reduction strategies.

We piloted the CFT with Robin Griffiths, one of our potato farmers. Once we were happy with its functionality and accuracy versus our previous agricultural models, we decided to roll the CFT out as our principal agricultural carbon calculator.

In order for our growers to become engaged with carbon reduction they need practical tools to enable them to measure on-farm emissions. The CFT does this. We are now working with The University of Aberdeen to enhance the CFT for specific crops – potato, oats, corn and apples and to translate it into other languages as we roll it out across Europe.

Mark Pettigrew

Agricultural Sustainability Manager,
PepsiCo UK and Ireland

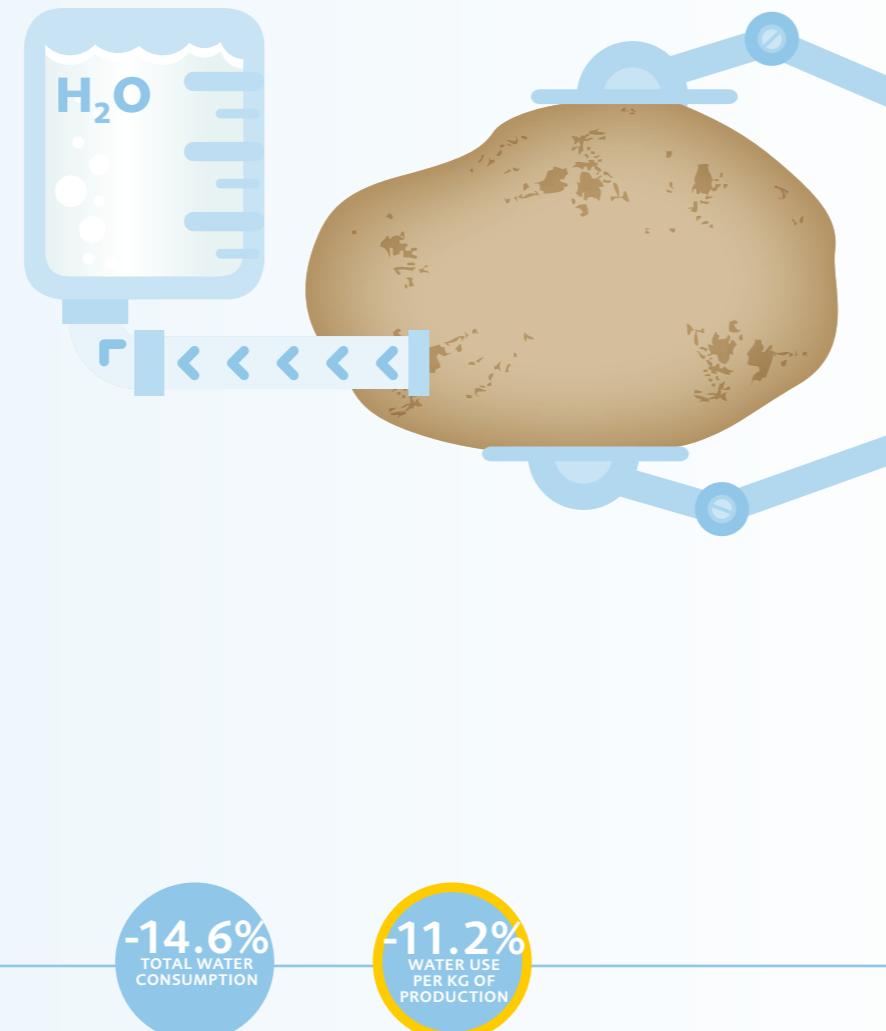


Caring about water

Water

Maintaining secure access to the quantity and quality of water we need while having a positive water impact in the communities and watersheds that we source from is our long-term challenge. We are already seeing water shortages and climate change impacts affect our business, such as through poor crop harvests.

Our approach to water is focused on our manufacturing sites and the farms that supply us, where the vast majority of our water consumption takes place. We will take our main manufacturing sites off the water grid by 2018, and reduce the water impact of the crops we grow in water stressed areas by 50% over the next 5 years. We will also continue to collaborate with others in understanding how to have a positive water impact and to protect the watersheds that we depend on throughout our supply chain.



Pledge

Carry out research to identify operations that risk contributing to water shortages.

Achieve zero water intake at our largest manufacturing sites within 10 years.

Reduce water use at British manufacturing sites by a further 45% per kg of production within 3 years.

Progress

By 2015 we will have identified all high risk sites. We plan to also de-risk all high risk sites by 2015.

We have successfully trialled the technology to extract the water from our potatoes to reuse in the factory. We now hope to take to scale, and share the technology with our developing markets.

Our sites reduced water use by 13% since we made our commitment. Implementing new technologies to extract water from our potatoes has been tougher than anticipated. We still hope to get near our target by the end of the 3 years.

New pledges

- Work with our UK farmers to achieve a 50% reduction in water impacts of key growers who operate in water stressed areas by 2015.
- Extend water risk screening to our farmers, helping them understand their local impact.
- Research to understand what net positive water impact would look like at local level and how we could achieve it.

Water and our business

The availability of fresh water of the right quality and quantity at the right time is critical to us and our supply chains, particularly for our raw materials. Climate change will mean greater incidence and severity of extreme weather patterns such as drought and flooding, both of which directly impact crop yields.

Competition for scarce water resources can lead to disruption of water supply and risks community conflict. In developing regions of the world this is already forcing factories and businesses to face up to their responsibilities, and where they do not, to close. The vast majority of our water consumption occurs in two areas – at our manufacturing sites where we make our products and at our farms where our crops are grown.

Two of our UK factories are located in areas currently defined as seriously water stressed by the Environment Agency and two of our sites are in areas considered to be moderately water stressed. A significant proportion of our potato supply comes from over-abstracted and over-licensed catchments, or priority catchments for catchment sensitive farming to combat diffuse pollution. To protect our business and supply chains we are committed to radically reducing our impact.

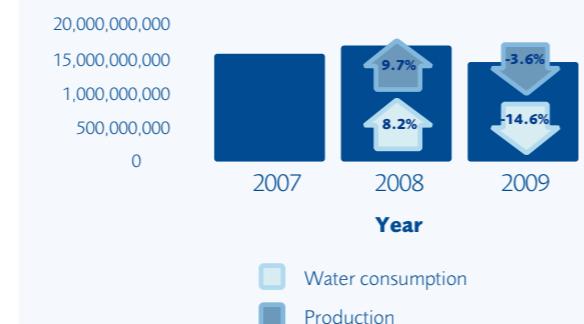
"Water is the poor second cousin of carbon. In the UK I do believe that unless you can show you are a responsible water steward from an agricultural and manufacturing perspective there are areas in the UK that will limit your ability to operate."

Walter Todd, Vice President of Operations, PepsiCo UK & Ireland



(Figure 4) **Saving Water**

Total change in water consumption at PUK sites versus production (2007-09), year on year % change



As our water consumption typically accounts for a very small proportion of the overall water use in a catchment, we will also work with other water users and organisations to understand our shared risk and responsibilities for reducing our individual and collective impact on watersheds.

Making a positive water impact in our operations

All our sites have carried out detailed water mapping exercises to identify the biggest water users in the manufacturing process, which informs a specific action plan for reducing water use at each factory.

We are continuously trialling new technologies to reduce water use and to identify opportunities to use re-circulated or recycled water instead of fresh water. Some of the new technologies and operational systems we have implemented have already produced excellent results; for example using recycled water instead of fresh water to peel and slice potatoes for Walkers crisps and "re-plumbing" the Boxford Haith apple polisher to use recycled water which saved 3,000 litres of water per shift.

Our aim is to unplug our largest factories from the water mains by 2018. Our strategy for achieving this is two-fold – reducing how much water we use to make our products and changing where we source our water from, for example by extracting water from our potatoes (see case study below). In 2009 we reduced consumption by 14.6% as part of our three year target to reduce water use by 45% reduction by the end of 2011.

Case study

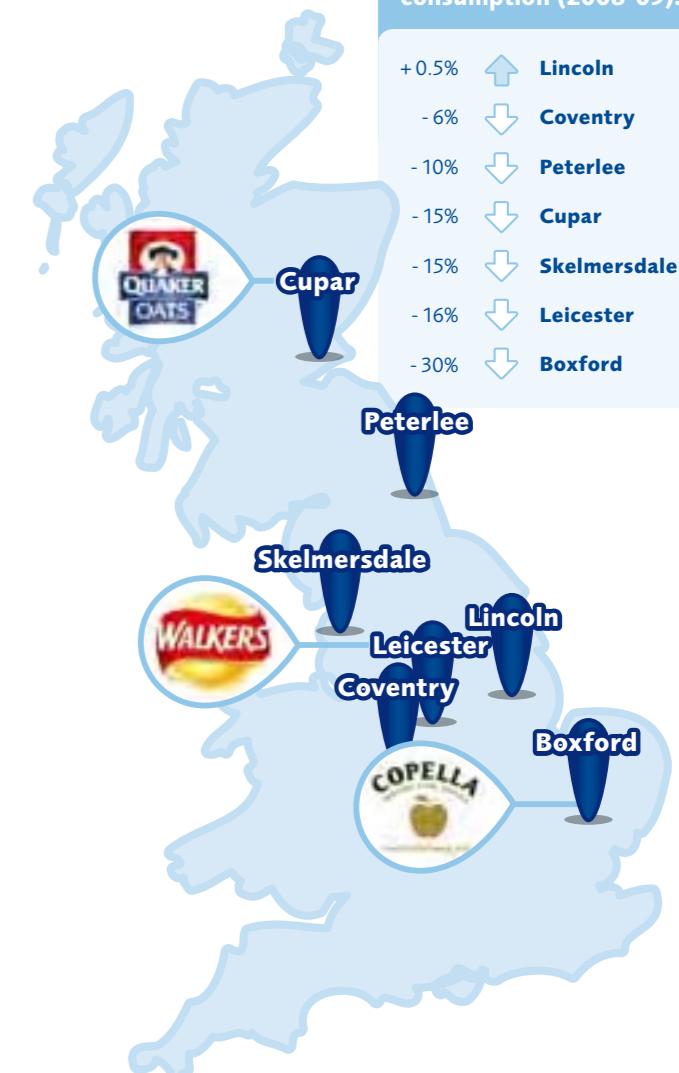
Extracting water from potatoes



We have begun trialling ways to extract water from potatoes. Typically 80% of a potato is water. Previously this water was lost during the cooking process but we are now looking at how to capture this water and use it to clean potatoes before they are cooked. Once perfected, we will begin rolling out this technology to our 4 crisp manufacturing sites. We expect this to allow us to unplug our largest sites from the water mains.

UK sites water consumption (2008-09):

| | |
|--------|--------------|
| + 0.5% | Lincoln |
| - 6% | Coventry |
| - 10% | Peterlee |
| - 15% | Cupar |
| - 15% | Skelmersdale |
| - 16% | Leicester |
| - 30% | Boxford |



Having a positive water impact in our supply chain

In 2008 we pledged to invest in research to identify the most environmentally sensitive ways of irrigating our crops. Having conducted extensive research using monitoring probes which measure soil moisture we have developed a PepsiCo Water Management Programme. We are piloting this programme with 20 crops as part of our Sustainable Potato Project – a collaboration with our farmers to address the environmental impacts of potato farming. Our target, introduced in 2010, is to reduce the water impact of our key farmers who operate in water stressed areas by 50% in 5 years.

Understanding the risks associated with our water use

We depend on secure supplies of high quality water to run our factories and grow our crops. Supply disruptions can mean production down time, reduced yields or worse, crop failure. We have long term relationships with our farmers rather than sourcing from the open market so we are directly affected by supply disruptions.

To anticipate potential problems we have mapped all of our European sites and crop growing locations using the WBCSD Global Water tool, as well as other indicators. These have allowed us to identify and prioritise which sites or regions require detailed investigations to understand the impact our water use has on local watersheds. Our goal is to actively "de-risk" our manufacturing locations: to consciously mitigate or manage water risks.

We will map the rest of our supply chains using these tools, and will also assess the risk of climate change, flooding and other natural disasters.

Case study

Tropicana water footprint pilot

In 2009 we undertook a pilot study to examine the water footprint of Tropicana orange juice, which took into account the entire lifecycle of a bottle of Tropicana. Initial findings confirm the importance of where and when water is used, not just the volume, in determining the impact and risk associated with our water use. The pilot found that our juice manufacturing plant in Zeebrugge, Belgium, where Tropicana is bottled, as a potential water risk in Tropicana's supply chain – due to its location in a high water stress area. The plant has an impressive water reduction record, reducing its total water consumption in 2009 by 16.5%, but due to its location a more radical water management strategy may be required. We are now conducting a pilot study to investigate this further.

PUK people making a difference

"Plentiful and cheap water has been taken for granted in some regions in the past but that is changing rapidly as demand for water resources intensifies with a growing population and changing consumption patterns. This has been further exacerbated by climate change which impacts on the reliability and availability of water. It's not enough anymore to just focus on using water efficiently. We are working to understand the risks and impacts associated with the water we use and discharge, particularly in sensitive watersheds."

Emma Clarke,
Sustainability Manager
PepsiCo UK & Ireland



Working with others

Water availability is a localised issue – individual watersheds need to be managed within the local context. We work with our growers, suppliers and other local stakeholders to understand watershed risks and the impact our water use and discharge has. Our target is to have a positive water impact in all the watersheds we operate in – increasing the quality and availability of water in each watershed. This can only be achieved by working with other users, communities, and organisations responsible for water resource management. We are undertaking pilot studies to understand how best to build partnerships and take positive action.

Ensuring that we source and discharge water without causing damage to local communities and ecosystems is at the heart of our recognition of water as human right. As a global business we have committed to respecting the human rights recognised by the countries in which we operate, and will not take any action that would undermine a state's obligation to its citizens to protect and fulfil the Human Right to Water and, absent of a country's Human Right to Water Policy, we commit to operate within the principles of the Human Right to Water Policy as defined by the United Nations.

Case study

Bursom Road 10 week water challenge

At the end of 2009, the Bursom Road facility, which is part of Walkers' Leicester site, challenged itself to a 10-week water savings challenge. During that time, everyone pitched in to repair even the smallest leaks and to conserve water.

The goal was to save money through water conservation and donate the savings to WaterAid, an international charity that provides safe water to villages, schools and communities. At the end of the 10-week challenge, Bursom donated £2,550 and achieved a 26% reduction in water consumption compared to the previous year.

Partnering to develop transparency and common standards

Water is a complex and immediate challenge for our business and we know we need to work collaboratively with a range of partners to ensure that the decisions we make are based on sound science and informed reasoning. We recognise the need for transparency and common standards – we are members of the **Carbon Disclosure Project**, an active partner of the **Water Footprint Network** and are working with the **FDF's Federation House Commitment**. We are also working to develop common standards and approaches with specialist working groups such as the **World Business Council for Sustainable Development**, **Beverage Industry Environmental Roundtable** and **UN CEO Water Mandate**.



Global water report

In September 2010, PepsiCo Inc released its first global water report, setting out its priorities, progress and future targets. These include: improving water use efficiency by 20% per unit of production by 2015; striving for positive water balance in its operations in water-distressed areas; and providing access to safe water to 3 million people in developing countries by the end of 2015.



Dilemma

How can we best collaborate with others to have a positive water impact in the watersheds where we withdraw or discharge water?

Products with purpose

Products

The environmental impact of our products extends beyond climate change and water. Tackling waste and packaging throughout the supply chain of our products, looking at how we make our current and future products to deliver our environmental commitments and communicating to consumers through our products to encourage pro-environmental behaviours are all crucial. We aim to achieve this by making and selling products with purpose.

We have now achieved zero waste to landfill in nine of our manufacturing and distribution sites, but our aim is to achieve this throughout our supply chain by 2018. We also want our product packaging to be made from renewable resources by the same date. We will extend our relationship with Magic Breakfast so that they can provide more healthy breakfasts for children in deprived areas. And we will continue to support organisations such as the Green Alliance and Carbon Trust that are seeking to communicate to consumers the benefits of adopting pro-environmental behaviours.

9
UK SITES
ACHIEVED
ZERO LANDFILL
WASTE

2%
REDUCTION IN
WEIGHT OF
WALKERS
PACKAGING

Pledge

Achieve zero landfill waste across our supply chain within 10 years.

All Quaker and Walkers packaging to be renewable, recyclable or biodegradable within 10 years.

Donate surplus Tropicana and Copella to breakfast clubs in deprived communities.

Quaker and Walkers to roll out Forestry Stewardship Council paper-based packaging, where appropriate, within 3 years.

Commission life-cycle assessments of our major packaging materials to identify optimal choices for greenhouse gas and water reduction.

Reduce Walkers packaging weight by a further 10% by 2010.

Progress

9 of the manufacturing and distribution sites directly operated by PUK have achieved zero landfill waste.

We are trialling new packaging types, such as the FSC paper-based packaging on our Red Sky crisps.

As part of Magic Breakfast, we donated Tropicana juice and Quaker porridge oats to breakfast clubs in schools serving deprived communities. In 2009 we reached an estimated 80,000 children.

Our new brand Red Sky is trialling FSC paper-based packaging. We hope to roll out FSC packaging more broadly in 2010-11.

We commissioned assessments on packaging for key beverages and savoury snacks, and have identified materials with lower carbon and water impacts.

Walkers packaging was reduced by a further 2%, short of our target. Moves towards shelf-ready packaging have slowed our progress towards further weight savings.



Key: Pledge on track Partial progress Limited/no progress



Environmental sustainability and our products

Any business is defined by the products or services which it makes and sells. Businesses have developed increasingly ingenious ways to identify new opportunities and to develop the products to exploit them. They predict, shape and even invent future trends in lifestyles and consumption. So the type of products that we make and how we make them must be integral to our environmental strategy.

We want to create products with purpose that reflect our environmental commitments, to encourage pro-environmental behaviours by consumers and contribute to helping individuals and society in leading healthy, sustainable lives.



Packaging

The majority of our packaging continues to be based on non-renewable sources, such as fossil fuels. In 2008 we committed to making all Walkers and Quaker packaging renewable, recyclable or biodegradable within 10 years. To date, our progress has been slow, partly due to the long term nature of the investment and research required to develop new types of packaging.

During October 2010, we announced research to look at using potato peelings, which currently go into animal feed and other recycling uses as the basis of our packaging for Walkers crisps. If the trials are successful, we would hope to have the first packs available in 2012/2013. We are also researching other materials such as cellulose, which may provide a compostable solution.

We also want to reduce the carbon emissions of our packaging. Our focus has been on our Walkers crisps and snacks, aiming to make the bag with as little packaging as possible, while still being fit for purpose. We committed to a further 10% reduction in 3 years. However, we were unable to make this level of further reduction, achieving 4% in total.

At the start of 2010 a new range of resized and lightweighted Copella bottles were launched. The new 750ml bottle is 10% lighter than before and the 1.25L bottle is 39% lighter. Producing the new bottles emits 1,070 less tonnes of CO₂e per annum. Bottle caps for Copella and Tropicana have also been improved, reducing CO₂e emissions by 342 tonnes per annum. In 2010 all Tropicana cartons were converted to new lightweight board. In addition to using less material to manufacture Tropicana's packaging, the cardboard for the new cartons is now also sourced from FSC certified forests. This ensures that we only source from sustainably managed forests.

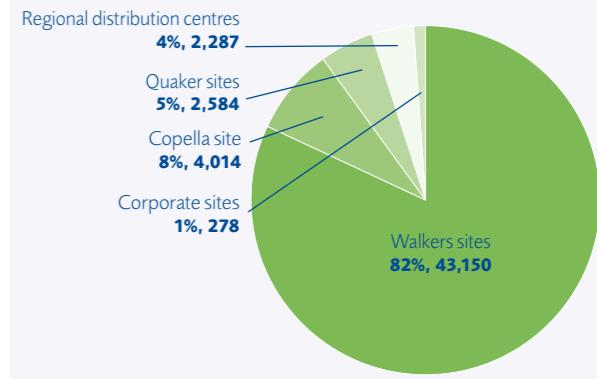
Reducing and recycling our waste

Reducing the amount of waste we produce and send to landfill is an immediate and visible way to reduce our environmental impact. Our manufacturing and distribution sites (the largest generators of waste) have been hugely successful in reducing the amount of waste they send to landfill. Over the course of 2009 seven of our manufacturing sites and two of our regional distribution centres have achieved zero landfill waste – recycling or re-using every single piece of waste generated.

Our target is to achieve zero landfill waste across all our operations and our entire supply chain by 2018. Achieving zero landfill waste at the sites we directly manage was the first step. We will apply our learnings to our entire supply chain.

(Figure 7) **Total PUK waste**

Where remaining PUK landfill waste is generated



Total waste in 2009 = 52,313 tonnes

Case study

Richmond office achieves zero landfill waste

Our corporate office in Richmond now recycles all waste produced at the site. This was achieved through a multi-layered strategy focused on reducing and recycling. In 2007 extensive recycling facilities were introduced where everything from plastic bottles to mobile phones could be recycled. This led to a massive reduction in the amount of general waste produced. Instead of allowing general waste to end up in landfill, it is instead made into pellets to be used as fuel in renewable energy plants.

(Figure 6) **Reducing landfill waste**

PUK waste from our sites sent to landfill versus production, year on year % change (2007-2009) based on comparative 2007 baseline data

| | 2007 | 2008 | 2009 |
|----------------|-------------|---------------------|--------------------|
| Landfill waste | 3476 tonnes | 2119 tonnes -39% | 424 tonnes -80% |
| | | +9.7% | -3.6% |

Community and supply chain

Like other food and drink businesses and despite our best efforts, not all of the products we make are able to reach the shop floor, restaurant or other destination that is intended. Often, the product is perfectly edible but because of short shelf life, broken packaging or another imperfection, we cannot offer the products for sale.

This provides a great opportunity for us to contribute to local communities. For example, Quaker and Tropicana donate surplus produce to charitable causes such as Magic Breakfast (see case study) and Marie Curie Cancer Care. In 2009 we began working with Marie Curie to donate porridge and orange juice to patients at its 9 UK hospices. Marie Curie provides free care to patients affected by cancer and other terminal illnesses.



Case study

magic breakfast fuel for learning

We've worked with Magic Breakfast since 2007 to donate Quaker Oats and Tropicana orange juice to primary schools in the poorest parts of the country. In the UK 1 in 4 children live in severe poverty,* and thousands go to school without having eaten breakfast. A hungry child cannot concentrate, so Magic Breakfast aims to provide a free, nutritious breakfast to each child who would otherwise start the school day too hungry to learn - their strapline is "fuel for learning". The charity also emphasises parent responsibility, ideally to offer a good breakfast at home.

As of December 2010, the partnership supports 172 schools, up from 51 in December 2009, and with our help Magic Breakfast has become a national organisation, feeding over 5,000 children each day in locations including London, Birmingham and Manchester.

The response from schools and students has been really positive, with partnership support resulting in improved child attendance, punctuality, behaviour and concentration. We will continue to support Magic Breakfast as they grow, building a strong partner school network in the most deprived areas of the UK. We're delighted to help thousands of children get the most from their morning at school.

* Research by Save the Children, Child Poverty Action Group

Working with others

If the UK is to meet its target of a 90% reduction in carbon emissions by 2050, consumers need to engage through their own lifestyles and the messages they give to politicians and business through their purchasing habits and how they vote. We want to play our part in raising consumer awareness about environmental challenges, and help to equip them to make lower carbon choices.

Carbon labelling

We communicate to consumers most directly through our products. Since 2007 we have worked with the Carbon Trust, and other partners, on the Carbon Reduction Label – sharing our product's carbon footprint on the front of pack and making a commitment to reduce it. Walkers and Quaker now carry the Reduction Label.

In November 2009, we published a report with the Carbon Trust to show progress since Walkers first adopted the label two years earlier, research into consumer understanding and our future plans. The report can be found at www.pepsico.co.uk/purpose/environment/environment-resources-library. We are also engaged in stakeholder conversations on sustainability labelling and how best to give consumers the information they need to act.

Engaging consumers

We're also working with the Green Alliance, and a consortium of other partners including WRAP, Groundwork, Asda-WalMart and Scottish Power on how to inspire public support for a low carbon society. The consortium's first report, "From Hot Air to Happy Endings" has now been published, and sets out a series of principles to help politicians, businesses and NGOs inspire the public to act on climate change, including:

Dilemma

How should we respond to consumer preferences that run against sustainability?

Be positive - Create a tangible and desirable vision of a low carbon future.

Tell a better story - Be clear that this is not just an environmental or a scientific issue, but one that relates to fundamental national concerns such as security. Inspire people and appeal to their values and emotions, using concepts such as freedom and fairness, not just statistics.

Show your own work – Government and business should promote their existing work "we are doing everything we can to make these changes possible, but we cannot do it without your help."



Collaborative leadership

Stakeholder engagement

Our pledges to transform our business will involve ingenuity, investment, and new areas of business capability. But they will also require us to be a catalyst for change – working with suppliers to reduce their impact, supporting public policies that set a framework to strip carbon out of the whole economy, and successfully engaging consumers on sustainability. And, as part of a great global company, we'll need to be an agent for change internationally – exchanging innovation with our developing markets.



New pledge

- Use our influence to encourage wider action on environmental sustainability, for example by supporting public policies that drive the transition to a low-carbon economy.

Stakeholders and our business

The external world – climate shocks, crop shortages, changing consumer preferences, new scientific developments, public policy and regulation – profoundly affects our business. But companies like PepsiCo – who have improved their environmental performance and set transformational long-term targets – also have influence, and can choose to use it as an agent for change – with suppliers, consumers and in setting public policy.

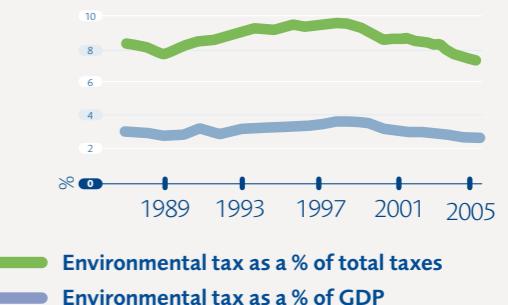
Over the last few years, Government, consumers, business, NGOs and others in the UK have actively tried to drive environmental progress. Collaboration with these groups; our peers, competitors, regulators and campaigners is key to developing the cohesive approach required to tackle climate change and other environmental challenges effectively. We have already supported influential groups, driven action in our supply chain, engaged with the wider food and drink industry and encouraged debate on environmental issues. We will continue to engage with stakeholders, taking a more activist stance and supporting public policies that provide a genuine framework for positive change.

Supporting policy frameworks for action

The UK has set major climate change goals – backed by the Government, Opposition, NGOs, academia and mainstream business. They are the right thing to do for the country and planet – delivering on energy security, and tackling climate change. They are also the right thing for business – providing secure supply chains, and addressing an issue that consumers increasingly want to see action on.

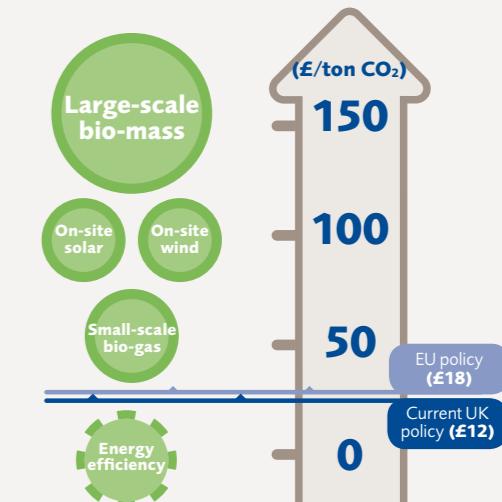
UK Environmental taxes

UK Environmental taxes as a percentage of total tax revenue and GDP



Carbon price

Viability of renewable energy technology



Current UK and EU legislation does not do enough to incentivise further investment in renewable energy technology. A shift in the tax burden towards environmental taxes, such as a carbon price above £50, would encourage businesses to make this investment – unlocking the renewable technologies we need to secure a low carbon Britain.

Dilemma

How can public policies that encourage environmental sustainability – such as carbon pricing – be unlocked?



PepsiCo is a willing partner. We've set stretching goals as part of our path to zero, including making our business fossil fuel free. These are huge undertakings. They will involve ingenuity, investment, and new areas of business capability. But goals and ambitions of this scale are not supported by policy. We lack a framework to turn aspirations into action. The Green Fiscal Commission in 2008 showed how environmental taxes have been falling, not rising.

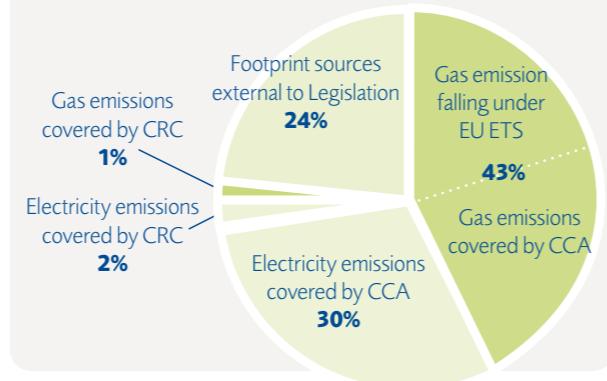
Business needs certainty to invest in the low carbon technologies of the future – a floor price on carbon appears to be the most effective long-term way to drive change, and make essential carbon saving technology economically viable.

In order to deliver our stretching targets on carbon reduction the current public policy mechanisms – like Climate Change Agreements (CCA's), the Carbon Reduction Commitment Energy Efficiency Scheme (CRC), and the EU Emissions Trading Scheme (EU ETS) do not provide sufficient stimulus.

Figure 9 on the previous page, shows the level of carbon price per tonne needed to enable both solar and wind power, alongside smaller-scale bio-gas. But, to protect the UK economy, tax would also need to be re-balanced from penalising profits and jobs and on to penalising carbon and environmental damage – a green tax switch. And the targets set across the UK and Europe need to be matched by other parts of the world.

Environmental taxes

Environmental taxes currently affecting PUK (and with proposed EU EYS scheme from 2013)



"To achieve radical carbon reduction, business will need Government to provide the right framework – real incentives, and a level playing field. But the right incentives are still not there. There is no effective price on carbon, no penalty for the laggards, little reward or predictability for those who invest in solutions. This Government faces a huge funding shortfall – and a simultaneous need to de-carbonise the economy. There is no better time to unite these two objectives. In the words of Al Gore: "We should tax what we burn, not what we earn."



Richard Evans

President, PepsiCo UK & Ireland

Bringing the outside in

The knowledge and expertise within our business forms the basis of our approach to environmental sustainability. We have a good understanding of our key impacts, our capability to deliver short term change and long term transformation based on those impacts and how to resource the business to meet those targets, while continuing to be successful and achieving our related priorities on issues such as health.

But a purely internal focus will only take us so far. Genuine engagement with experts, advisers and critics improves our knowledge, tests the credibility of our approach and identifies gaps and opportunities for new work. It also provides the basis for potential collaboration to set more stretching targets and increase the impact of the work that we do.

As with our previous Environment Report released in 2008 (and our first Health Report released earlier this year), we have engaged widely to understand and incorporate feedback from academics, NGOs, political stakeholders and others on progress, our plans and how we should report our activity. In the last twelve months, we have also held workshops on responsible water stewardship and sustainable agriculture. As well as informing our approach, we have put the outputs of these debates on our website, which can be found at: www.pepsioco.uk/environmentresources-library

To maximise the positive impact of the changes that we make and to meet some of our ambitious targets, we will need to work with others in our supply chain, in our industry and in business more widely, in Government, and in civil society who share our goals. By sharing our knowledge and progress with others we can also be a catalyst for change beyond our immediate sphere of influence. We call this approach collaborative leadership.

Advisory Board

In 2006 PUK set up its first External Advisory Board, designed to give the business direct and candid advice on its corporate strategy, R&D priorities, external threats and opportunities and its corporate and brand reputation. Its members have a wide range of expertise, covering public policy, consumer behaviour and attitudes, climate change, carbon and nutrition. The Advisory Board reports directly to the PUK & Ireland President, Richard Evans.

The Advisory Board has been important in encouraging many other forms of external engagement, helping outside experts to develop and review our environmental policies and actions – at both Board and Operational levels.

Pro-environment public affairs

We know that we, and other stakeholders, need to adopt consistent public policy positions – whether representing our own views directly or via our trade associations. Our positions need to be grounded in robust scientific evidence on climate change, water stress and other environmental challenges. We will work with policymakers to support measures that help to address climate change and the rise in carbon emissions. We will disclose all of our memberships of trade associations, and our partnerships or funding arrangements with think-tanks or research institutes. We will engage our trade associations to ensure their positions support effective climate action.

Putting environmental sustainability in context

Capability and governance

Responsibility for sustainability including the environment lives at board level within the business, with a direct reporting line into our President. Our Central Sustainability Team, based within Operations is responsible for ensuring that the knowledge and systems are in place to deliver our existing targets and identify emerging issues that we need to consider. They are supported by Sustainability Managers in each of our manufacturing sites, which are ISO 14001 accredited. We report to PepsiCo Inc quarterly on our key environmental metrics including energy and water.

All new product development goes through a "gate" process, which is reviewed and approved by the Activation Committee comprising senior Directors from the UK business. Alongside technical and commercial information, new products must show how they contribute to our environment and health objectives.



Dilemma

How do we integrate our policies and actions on human health, agriculture and the environment to make sure that they support each other?

Healthier growth

Our response to the challenges associated with the environment and health will determine the future direction of PepsiCo and what our business will look like in 20 years' time. PepsiCo, as a large food and drink manufacturer, can make an important contribution by making and selling healthier products and reducing our environmental impact. We are committed to doing so.

Our health report

Earlier this year we published our first Health Report which sets out our strategy to continue to renovate the core of our business and accelerate our growth into healthier products. Our aim is for our profit and growth to be driven by healthier products by 2020.



We will achieve this by:

- transforming our portfolio towards healthier products providing genuine nutritional benefit
- being the most positive agent for change in the UK food and drink industry.
- reducing the calorie count of our portions so they fit within a healthy lifestyle
- making our healthier options available to all
- acting transparently, engaging widely and promoting best practice and accountability in the UK and globally

"Over the next few years, we will do two things. We will expand our delivery of positive nutrition - fruit, fibre, wholegrain, vegetables and micronutrients, and even more significantly we will renovate the core of our business, transforming the savoury snack and soft drink categories.

The changes we seek to make will take time, effort and resources – but they are achievable. I believe companies like PepsiCo have a responsibility to lead change – and to be accountable for it."

Richard Evans,
President,
PepsiCo UK & Ireland



Environmental sustainability and health

The disruptive effects of man-made climate change won't just impact our environmental sustainability at local, national and global levels; they will also affect the health of individuals and families all over the world.

According to the Climate and Health Council, of which PepsiCo is a founding member, rising temperatures will lead to over 60,000 deaths each year through rising sea levels, disruptive and more extreme weather patterns, flooding, crop failure and an increase in conditions favourable to the epidemic spread of disease.

As sanitation deteriorates, and access to water becomes scarcer, killer diseases like malaria, mal-nutrition and diarrhoea become more widespread. Over the last few years several key fruit and vegetable crops in the UK had their worst yield for a number of seasons because of adverse weather conditions. Over time, events like this will affect the nutritional intake of UK households and make buying essential food stuffs more expensive.

A recent failure of the Sanguinello orange crop in Sicily, our only source for that variety, damaged our sales of fruit juice and delivery of vitamin C. Lower emissions will help our food security, prevent rising sea levels and reduce the likelihood of contracting respiratory and water-borne diseases. The health benefits of taking action for us individually and for the environment are clear.

Our global approach – the Promise of PepsiCo

PepsiCo Inc, led by our Chairman and CEO Indra Nooyi, has a global vision – to deliver Performance with Purpose. This means delivering sustainable growth by investing in a healthier future for people and our planet. PepsiCo Inc is committed to building a portfolio of enjoyable and wholesome foods and beverages, finding innovative ways to reduce the use of energy, water and packaging, and providing a great workplace for our people.

ENVIRONMENTAL SUSTAINABILITY

To the planet we all share...

It's a promise to be a good citizen of the world, protecting the Earth's natural resources through innovation and more efficient use of land, energy, water and packaging in our operations.*

OUR GOALS AND COMMITMENTS

WATER:
Respect the human right to water through world-class efficiency in our operations, preserving water resources and enabling access to safe water.

- Improve our water use efficiency by 20 percent per unit of production by 2015.
- Strive for positive water balance in our operations in water-distressed areas.
- Provide access to safe water to three million people in developing countries by the end of 2015.

LAND AND PACKAGING:
Rethink the way we grow, source, create, package and deliver our products to minimize our impact on land.

- Continue to lead the industry by incorporating at least 10 percent recycled polyethylene terephthalate (rPET) in our primary soft drink containers in the U.S., and broadly expand the use of rPET across key international markets.
- Create partnerships that promote the increase of U.S. beverage container recycling rates to 50 percent by 2018.
- Reduce packaging weight by 350 million pounds—avoiding the creation of one billion pounds of landfill waste by 2012.
- Work to eliminate all solid waste to landfills from our production facilities.

CLIMATE CHANGE:
Reduce the carbon footprint of our operations.

- Improve our electricity use efficiency by 20 percent per unit of production by 2015.
- Reduce our fuel use intensity by 25 percent per unit of production by 2015.
- Commit to a goal of reducing greenhouse gas (GHG) intensity for U.S. operations by 25 percent through our partnership with the U.S. Environmental Protection Agency Climate Leaders program.
- Commit to an absolute reduction in GHG emissions across global operations.

On environmental sustainability, the global business has made a number of commitments on water, land and packaging, climate change and community including an absolute reduction in greenhouse gas emissions across global operations. Our path to zero supports these ambitions, taking into account the specific circumstances of the UK business and our key environmental challenges, the policy framework and the opportunities to engage and work with our stakeholders.

Scenarios and Strategy 2030

In 2009, Forum for the Future used global scenarios to help PepsiCo identify the major sustainability risks and opportunities that we will face in 2030 and what we need to do now to ensure we are successful in the decades to come. The project highlighted that the companies that will prosper will be those that have prepared for future challenges - like water scarcity, climate change and obesity – and, critically, those that are actively helping to overcome these challenges now.

The scenarios were developed specially for PepsiCo and were based on extensive desk research, a series of workshops and over 100 interviews on possible future environment and health trends.

The interviewees ranged from senior executives at PepsiCo, including Chairman and CEO Indra Nooyi, to external experts like Gro Harlem Brundtland, the former Prime Minister of Norway and ex-Director General of the World Health Organisation. We also held a number of implications workshops in the US, India, China, Latin America and Europe.

One outcome of the Scenarios and Strategy work is that PepsiCo is building a larger team to focus on sustainable agriculture, so it can mitigate the risks that climate and water crises pose to its supply chains, now and in the future. The project work has also contributed to the development of new strategies for the business on the environment and health, including our path to zero approach outlined in this report.



"PepsiCo's commitment to sustainability is about an idea of the company which focuses on the long-term, as our Scenarios 2030 project has shown us. We cannot contribute properly to finding an end to the climate crisis until we bring environmental and social governance into our long-term business strategies and decisions. It's not all about the risks, but also about the opportunities."

Indra Nooyi, Chairman and CEO, PepsiCo.

Future challenges



"PepsiCo is continuing to make strong progress against its ambitious long-term targets. The biggest challenge will be growing this momentum, within the business and more widely. It's refreshing to see PepsiCo's 'outside-in' approach - working in genuine partnerships along its supply chain, with NGOs and with government – and we'd encourage others to follow this example. We're pleased that sustainable agriculture is now getting the attention it merits – as we suggested in our Scenarios and Strategies work - and is becoming a major focus for the UK business."

Peter Madden,
Chief Executive, Forum for the Future

CARBON DISCLOSURE PROJECT

"PepsiCo has a high standard of both carbon reporting and carbon performance. We are pleased to be working together through CDP's supply chain programme, to identify climate change and carbon impacts throughout the supply chain. This is one of the most challenging and complex areas in terms of emissions management, both in terms of data collection and carbon management, but it is a crucial area for companies to focus on, as this is where many embedded risks and opportunities lie."

Paul Dickinson,
Executive Chairman, Carbon Disclosure Project



"Businesses will play an increasingly important role in helping to reduce wider carbon emissions. This report shows that

PepsiCo are serious about minimising their environmental impact and the new sections on agriculture and collaborative leadership are welcome in showing ambitions beyond their own operations. PepsiCo is working with Green Alliance through the Green Living Consortium to drive pro-environmental behaviour. I look forward to seeing how the company will work with their consumers in the future to reduce their carbon footprint."

Tamsin Cooper,
Deputy Director, Green Alliance

Basis of Reporting

Reporting period and entities covered

The PUK Environmental Sustainability Report 2010 ("the Report") provides data and information for the period January–December 2009, except where specifically noted. Unless otherwise stated the data covers all of our UK manufacturing, distribution, corporate and research & development sites and facilities, and relate to the activities of PUK - not our parent company PepsiCo Inc, or other PepsiCo businesses. PUK includes Quaker, Tropicana, Copella, Walkers and their sub-brands.

In 2009, all our 7 current UK manufacturing sites, 4 main distribution centres and 3 corporate offices (see www.pepsico.co.uk/about) reported environmental performance data and this is represented in the Report – showing the PUK carbon footprint, energy use, water use and waste. We have also included the allocation of the footprint or impact of PepsiCo manufacturing in Hermes, Rotterdam, Zaandam and Zeebrugge produced for the UK market. Data in some sections, for example on product-level carbon footprints, cover a wider scope which is clearly stated. For 2009 we have continued to include air travel and company car fuel consumption.

The Central Sustainability Team collects data from UK sites 12 times a year, which is then consolidated and published for the Vice President of Operations and his team to review and drive performance against. The data for Hermes, Rotterdam, Zaandam and Zeebrugge is collected in a similar way by our PepsiCo European counterparts, with the data being then provided to the Central Sustainability Team annually.

We have not included in this Report energy, water and waste data from several overseas PepsiCo production sites that supplied small volumes to the UK market during 2009:

- Bongloon in Belgium produces small quantities of ambient juice (equivalent to 0.08% of PepsiCo production for the UK);
- Naked Smoothies, introduced to the UK in late 2007, are produced in the United States (equivalent to 0.07% of PepsiCo production for the UK);
- A small amount of other products may be on sale in the UK market, imported from our other non-UK businesses, or manufactured on our behalf that we have made the decision not to include, as they constitute only 0.8% of production.

In addition, we have not included data from two sales offices in Ireland (Dublin and Drogheda). It was not possible to collect data from these locations; however it is important to note that only 3 people operate

from these offices and they constitute a tiny percentage of the overall PUK footprint.

We have not included electricity / gas / water data from our satellite distribution depots for the same reasons of scale as above. We do include the fuel use of the van fleet operating from these depots.

We have also included energy, water and waste data for products that we have manufactured in the UK for export to other markets. The most significant is at Cupar, our sole UK production site for Quaker, where 49% of the volume produced is exported. In addition other PUK sites exported 1,608 tonnes of finished products, equivalent to 0.57% of PUK's UK production volume.

Quality of data

We have Site Sustainability Managers in place covering all our manufacturing and distribution sites and a Central Sustainability Team. We have continued to use internal scorecards, have 100% corporate reporting on energy, and we have implemented an ISO 14001 Environmental Management System covering our manufacturing and distribution sites. We have developed a formal Data Collection and Reporting Protocol, which has been communicated to all Site Sustainability Managers, strengthening the review, validation and formal sign-off process for all periodic submissions of data to the Central Team with periodic senior team sign-off.

Comparability of data from year to year may be affected by changes in the number and attributes of PUK facilities, changes in the methodology for determining certain data and continual improvements in our performance measurement systems. Although we are confident in the overall reliability, we recognise that some site level variations in data collection methodologies may exist. This is minimised through providing ongoing training to sites and through communications with the sites and business units.

Throughout the Report data is often represented as percentage change in performance from the previous year using the previous year's organisational scope. This is to allow for better comparability of performance. Where this is not the case, an explanation is provided in the text.

Criteria and definitions

For a detailed explanation of our data definition, collection methods, and basis of calculation please see the key Criteria and Definitions data table on pages 42-45. A full version of this scope of reporting can be found on our website, www.pepsico.co.uk/environment.

PUK 2009 Criteria and Definitions

| Areas for assurance | Indicator title (measure) | Definition | UOM | 2009 Value | Geographical Scope | How collected | Basis of calculation | GRI Indicator |
|---------------------|---------------------------------------|---|-------------|-------------|--|--|---|---------------|
| 1 | Total direct energy use by PepsiCo* | Our direct energy use arises as a consequence of the activities of PepsiCo production in and for the UK market, from sources that are owned or directly controlled by PepsiCo. In this report these are our on-site gas and oil burners. | kWh | 464,787,517 | PUK sites, Hermes Rotterdam, Zaandam Zeebrugge | Each site inputs values for gas (kWh) and gas oil (litres), from meters / supplier bills into site spreadsheet. 12 times p.a. European site submitted data after year end | Gas oil (l) converted to kWh using DEFRA conversion factor. All sites' gas (kWh); and gas oil (kWh) aggregated in central spreadsheet. | EN3 |
| 2 | Total indirect energy use by PepsiCo* | Our indirect energy use arises as a consequence of the activities of PepsiCo production in and for the UK market, but occurs from sources controlled by other companies. In this report indirect energy use covers the electricity procured from the national electricity grids of the UK, the Netherlands and Belgium. | kWh | 139,792,640 | PUK sites, Hermes Rotterdam, Zaandam Zeebrugge | Each site inputs values for electricity (kWh), from meters / supplier bills into site spreadsheet. 12 times p.a. European sites submitted data after year end | All sites' electricity (kWh) aggregated in central spreadsheet. | EN4 |
| 3 | Total PepsiCo UK carbon footprint* | Our total carbon footprint includes the CO2e arising from our direct and indirect energy use, the fuel used by our distribution fleet and employee car travel and for 2008, employee air travel. | Tonnes CO2e | 219,473 | PUK sites, Hermes Rotterdam, Zaandam Zeebrugge | Outputs from the indirect & direct energy use measures, in addition to: - Distribution fleet - aggregation of fuel (litres) purchased. - Car travel is an aggregation fuel purchased on company fuel cards, and mileage claimed by employees using their own cars for business use. - Air Travel – aggregation of air net mileage compiled by HRG for PepsiCo. | Data on greenhouse gas (GHG) emissions from energy use are reported as carbon dioxide equivalents (CO2e) and calculated in line with the 2009 Guidelines to DEFRA/DECC's GHG Conversion Factors for Company Reporting. With regard to Air Travel we have used DEFRA/DECC's guidance, however we have also applied a factor of 2 for Radiative Effect which is not included in DEFRA/DECC's methodology | EN16, EN17 |

| Areas for assurance | Indicator title (measure) | Definition | UOM | 2009 Value | Geographical Scope | How collected | Basis of calculation | GRI Indicator |
|---------------------|---|---|------------|------------|--|--|--|---------------|
| | Energy use per kg of production (Walkers crisps and snacks) | Total (indirect and direct) energy use used to make 1 kg of Walkers product | kWh per kg | 2.48 | PUK Walkers potato crisp and snacks manufacturing sites | Indirect / direct energy data collected as above. Production volumes collected by Central Finance team via automatic, end of line (bar code readers), production recording system. | Production volumes converted automatically from cases to kg in financial system, and verified by Central Finance team. Volumes and energy use then aggregated in Central Sustainability spreadsheet and value calculated automatically to achieve stated values. | EN5, EN6 |
| | Energy use per kg of production (Walkers crisps) | Total (indirect and direct) energy use used to make 1 kg of Walkers potato crisps | kWh per kg | 2.85 | PUK Walkers potato crisp manufacturing sites | Indirect / direct energy data collected as above. Production volumes collected by Central Finance team via automatic, end of line (bar code readers), production recording system. | Production volumes converted automatically from cases to kg in financial system, and verified by Central Finance team. Volumes and energy use then aggregated in Central Sustainability spreadsheet and value calculated automatically to achieve stated values. | EN5, EN6 |
| 4 | Energy use per kg of total production (PUK)* | Total (indirect and direct) energy use used to make 1 kg of PIUK product | kWh per kg | 1.17 | PUK Manufacturing Sites, Hermes, Rotterdam, Zaandam, Zeebrugge | Indirect / direct energy data collected as above. Production volumes collected by Central Finance team via automatic, end of line (bar code readers), production recording system. European production data submitted after 2009 year end. | Production volumes converted automatically from cases to kg in financial system, and verified by Central Finance team. Volumes and energy use then aggregated in Central Sustainability spreadsheet and value calculated automatically to achieve stated values. | EN5, EN6 |

| Areas for assurance | Indicator title (measure) | Definition | UOM | 2009 Value | Geographical Scope | How collected | Basis of calculation | GRI Indicator |
|---------------------|--|--|---------------|---------------|---|--|--|---------------|
| 5 | Total waste recycled* | Total amount of solid waste recycled and waste incineration to power | Tonnes | 51,197 | PUK sites, Hermes Rotterdam, Zaandam Zeebrugge | All streams weighed as they are despatched from site. Weights recorded, cross-checked with invoices raised for receiving company, and entered in spreadsheet. The aggregation is then reported 12 times pa. European sites data submitted after year end. | All site data are aggregated in central spreadsheet. | EN22 |
| 6 | Total waste to landfill* | Total amount of solid waste sent to landfill | Tonnes | 1,116 | PUK sites, Hermes Rotterdam, Zaandam Zeebrugge | Weight assumption for each load leaving site made by visible inspection. Recorded in spreadsheet, aggregated 12 times p.a.. European sites submitted after year end. | All site data are aggregated in central spreadsheet. | EN22 |
| 7 | Total water use* | Total amount of water used | Litres | 1,463,283,734 | PUK sites, Hermes Rotterdam, Zaandam Zeebrugge | Site water meter readings taken at least weekly, recorded and aggregated in spreadsheets. European site data submitted after year end. | All site data are aggregated in central spreadsheet. | |
| | Water use per kg of production (Walkers crisps and snacks) | Water used to create 1 kg of Walkers product | Litres per kg | 5.84 | PUK Walkers potato crisp and snacks manufacturing sites | Site water meter readings taken weekly, recorded and aggregated in spreadsheets. Production volumes collected by Central Finance team via automatic, end of line (bar code readers), production recording system. | Production volumes converted automatically from cases to kg in financial system, and verified by Central Finance team. Volumes and water use then aggregated in Central Sustainability spreadsheet and value calculated automatically to achieve stated values. | |

| Areas for assurance | Indicator title (measure) | Definition | UOM | 2009 Value | Geographical Scope | How collected | Basis of calculation | GRI Indicator |
|---------------------|---|--|---------------|------------|--|---|--|---------------|
| | Water use per kg of production (Walkers crisps) | Water used to create 1 kg of Walkers potato crisps | Litres per kg | 6.79 | PUK Walkers potato crisp manufacturing sites | Site water meter readings taken weekly, recorded and aggregated in spreadsheets. | Production volumes converted automatically from cases to kg in financial system, and verified by Central Finance team. Volumes and water use then aggregated in Central Sustainability spreadsheet and value calculated automatically to achieve stated values. | |
| 8 | Water use per kg of production (PUK)* | Water used to create 1 kg of PUK product | Litres per kg | 2.89 | PUK Manufacturing Sites, Hermes, Rotterdam, Zaandam, Zeebrugge | Site water meter readings taken weekly, recorded and aggregated in spreadsheets. Production volumes collected by Central Finance team via automatic, end of line (bar code readers), production recording system. European production data submitted after 2009 year end. | Production volumes converted automatically from cases to kg in financial system, and verified by Central Finance team. Volumes and water use then aggregated in Central Sustainability spreadsheet and value calculated automatically to achieve stated values. | |
| 9 | Levels of harmful pollutants in the PUK distribution fleet* | The burning of diesel in the PUK distribution fleet releases NO2 & NO3 known as NOx. | Tonnes | 633 | PUK Logistics Sites | Fleet holdings of Euro Class vehicles are recorded each period. Consumption of diesel is reported each period by logistics sites. | Total fleet diesel consumption (litres) is converted to kWh's and multiplied by average fleet NOx emissions (g NOx per kWh diesel) to give total NOx emissions. | |

* Indicates performance data reviewed by Deloitte LLP as part of their environmental sustainability assurance work. See pages 46 and 47 for the assurance statement.

Deloitte.

Independent assurance statement by Deloitte LLP ('Deloitte') to PepsiCo International Limited on selected information included in the PepsiCo UK and Ireland ('PUK') Environmental Sustainability Report 2009/10.

What we looked at: scope of assurance work

PepsiCo International Limited have engaged us to perform limited assurance procedures on selected environmental sustainability performance data for the year ended 31 December 2009. The assured data appear in the 'Environmental Sustainability Report 2009/10' (the 'Report') at <http://www.pepsico.co.uk/environment> and are indicated by the * symbol.

What we did: assurance process and standards

Engagement assurance standards

We conducted our work in accordance with the International Standard on Assurance Engagements 3000 (ISAE 3000) issued by the International Auditing and Assurance Standards Board (IAASB) for carrying out assurance engagements on non-financial information.

This is a limited assurance+ engagement, which is designed to give a similar level of assurance to that obtained in a review of interim financial information.

Assurance procedures

This standard requires that we review the systems, processes and controls that deliver the selected performance data.

Our work consisted primarily of making inquiries of company personnel and carrying out analytical procedures and sample tests as follows:

- understanding, analysing and testing on a sample basis the collation, validation and reporting of the selected performance data by PUK in accordance with their definitions and basis for calculation which can be found at <http://www.pepsico.co.uk/environment>; and
- reading and analysing the content of the Report against the findings of our work, industry sustainability practices and other relevant information and, as necessary, making recommendations for improvement.

The limited assurance+ procedures engagement excludes procedures such as testing of source data and operating effectiveness of controls and is substantially less in scope than a reasonable assurance+ engagement. Accordingly we do not provide reasonable assurance on those matters specified in this statement.

What we found: our conclusions

Based on the work we performed, we are not aware of anything that causes us to believe that the environmental sustainability performance data indicated by the * symbol is materially misstated.

Responsibilities of Directors and independent assurance provider

PUK's responsibilities

- The directors are responsible for the preparation of the Environmental Sustainability Report and for the information and statements contained within it. They are responsible for determining PUK's objectives in respect of Environmental Sustainability performance and for establishing and maintaining appropriate performance management and internal control systems from which the reported information is derived.

Deloitte's responsibilities and independence

- Our responsibility is to independently express a conclusion on the selected performance data indicated by the * symbol as defined within the scope of work above.

• We complied with Deloitte's independence policies, which address and, in certain areas, exceed the requirements of the International Federation of Accountants Code of Ethics for Professional Accountants. We have confirmed to PUK that we have maintained our independence and objectivity throughout the year, and in particular that there were no events or prohibited services provided which could impair our independence and objectivity in the provision of this engagement.

- This statement is made solely to PepsiCo International Limited in accordance with our letter of engagement for the purpose of the directors' governance and stewardship. Our work has been undertaken so that we might state to PUK those matters we are required to state to them in this statement and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than PepsiCo International Limited for our work, for this statement, or for the conclusions we have formed.

Deloitte LLP

London

5 January 2011

Footnote +: The levels of assurance engagement are defined in ISAE 3000. A reasonable level of assurance is similar to the audit of financial statements; a limited level of assurance is similar to the review of a six-monthly interim financial report.



PEPSICO

UK & Ireland

For more information visit our website:
www.pepsico.co.uk/environment

**Safe Harbor Statement
(regarding forward-looking
statements):**

Any forward-looking statements in this Report are made under the Safe Harbor provisions of the US Private Securities Litigation Reform Act of 1995. All of our forward-looking statements involve risks, uncertainties and assumptions.

If any such risks or uncertainties materialise or if any of the assumptions proves incorrect, our results could differ materially from the outcomes implied by the forward-looking statements made.