

**Food and Drink
Federation**



Delivering Sustainable Growth

**Our Five-fold Environmental
Ambition: Progress Report 2011**



Introduction

As the UK's largest manufacturing sector, we are proud of the leadership and progress FDF's Five-fold Environmental Ambition is continuing to deliver for the food and drink industry.

In the critical area of CO₂ emissions, we passed our 2010 target of a 20% reduction a year early. This year's figures show that we have achieved savings of 25% – well on track to meet our revised target of 35% by 2020! In this and other areas, we have also improved performance while increasing output to meet higher demand – successfully decoupling environmental impacts from economic growth, which is key to meeting the sustainability challenges of the future and to our own and global food security.

When we reviewed the Five-fold Environmental Ambition last year, we also identified the need to look beyond the manufacturing process at how we could help promote improved sustainability across the supply chain. We set ourselves a number of new aims relating to the raw materials we use and what happens to the products we make and sell across their whole life-cycle. We recognised that this would require collaboration and engagement with a wider range of partners, and that success would depend on collective action as well as our own efforts, ideally in the context of a shared vision about the future direction of travel. We also recognised the need to remain competitive and profitable to be able to invest in the innovation and technology that would be required.

We were very pleased to see the Government's Foresight report, 'The Future of Food and Farming' come to similar conclusions about the need to **produce more, from less and with less impact** and for a clear strategic framework through which to address these challenges – at both national and international levels.

The subsequent publication of the Natural Environment White Paper and the accompanying National Ecosystem Assessment underline the importance of protecting the biological systems

on which food production depends and the complexity of balancing different demands on basic resources and the potential trade-offs involved.

Getting this right is key to the stable future supply of safe, nutritious and affordable food and drink, and to the opportunities for wealth creation and low-impact economic growth which a competitive and sustainable manufacturing sector can provide.

In this, our fourth annual progress report, we set out what we have achieved against our revised targets for efficiencies within members' own operations – supported as usual by a variety of case studies showing how this has been done – and the steps we have taken to address the bigger picture issues in respect of water use elsewhere in the supply chain, the importance of biodiversity and the need to promote responsible and sustainable sourcing.

We look forward to continuing this journey in 2012 and contributing to the work of Defra's Green Food project, the Government's broader growth strategy and the other partnerships and initiatives that will help us to succeed.

A handwritten signature in black ink that reads "Nick Bunker". The signature is stylized and written in a cursive-like font.

Nick Bunker,
President UK & Ireland, Kraft Foods and
Chair of FDF's Sustainability Steering Group



Foreword

“It is hugely encouraging to see that sustainable behaviours are now well embedded in the operation of the food and drink manufacturing sector, and to note the financial benefits which better resource efficiency bring as well as environmental gain. This is more important than ever given the current economic climate.”

However, there is no scope for complacency. As the Government’s Foresight Report on the Future of Food and Farming indicated, there is a huge challenge ahead of us to balance the competing pressure and demands on the global food system.

This challenge applies to the whole of the food supply chain, so I am particularly pleased to see that the Five-fold Environmental Ambition is encouraging collaboration and engagement with food producers on sustainability objectives. We all recognise the long term need to increase production of high quality food to fulfil growing world population needs, with less waste and less demand on vital resources such as energy and water. We also need to act now, even though this may be challenging in the short term given the uncertain economic circumstances in many of the UK’s traditional markets.

The range of case studies included in the report yet again demonstrates the industry’s ability to work hard and creatively to find practical and economic solutions to improve resource efficiency and reduce costs. The reporting against targets

shows that the sector continues to make good progress on a number of fronts and I commend those who are sustaining and increasing output with better use of energy and water and less waste. I also look forward to seeing the result of the Federation’s work on biodiversity and its importance for the supply chain.

Finally, I welcome the Federation’s leadership in playing an active and constructive role in the Defra Green Food project, which will help to shape the future of our food policy.

A handwritten signature in black ink, appearing to read 'James Paice', written in a cursive style.

James Paice MP,
Minister of State for Agriculture and Food

Our core ambitions

Launched in 2007, our Five-fold Environmental Ambition was founded on the need for greater resource efficiency in our sector's own operations. Our performance to date is evidence of the commitment of our members and of the tangible business benefits which improved performance brings. This is all the more important at a time of rising commodity prices and other cost increases, which is why we reviewed and updated our targets last year, as part of our industry's wider contribution to generating sustainable growth.

Revised targets following 2010 review

- Achieve a 35% absolute reduction in **CO₂ emissions** by 2020 against a 1990 baseline
- Seek to send zero food and packaging **waste** to landfill at the latest by 2015 and make a significant contribution to WRAP's Courtauld 2 target of reducing product and packaging waste in the supply chain by 5% by end of 2012 against a 2009 baseline
- Make a significant contribution to WRAP's work of reducing the carbon impact of **packaging** by 10% by 2012 against a 2009 baseline
- Achieve significant reductions in **water** use to help reduce stress on the nation's water supplies and contribute to an industry-wide absolute target to reduce water use by 20% by 2020 compared to 2007
- Embed environmental standards in **transport** practices, including contracts with hauliers as they fall for renewal, to achieve fewer and friendlier food transport miles and make a contribution to IGD's Efficient Consumer Response UK Sustainable Distribution Initiative to save 200 million HGV miles over the period 2007-12 in the grocery sector

Summary progress to date against our targets

We have continued to make excellent progress this year. In particular we have:

- Cut CO₂ emissions by 25%
- Reduced product and packaging waste in the supply chain by 6.9%
- Cut the carbon impact of packaging by 1.2%
- Reduced water use (outside of that embedded in product) by 5.3%
- Saved 163 million HGV road miles¹

¹This is the latest saving recorded by IGD through its ECR sustainable distribution initiative and includes savings from retailers, wholesalers and manufacturers

Cutting CO₂ emissions

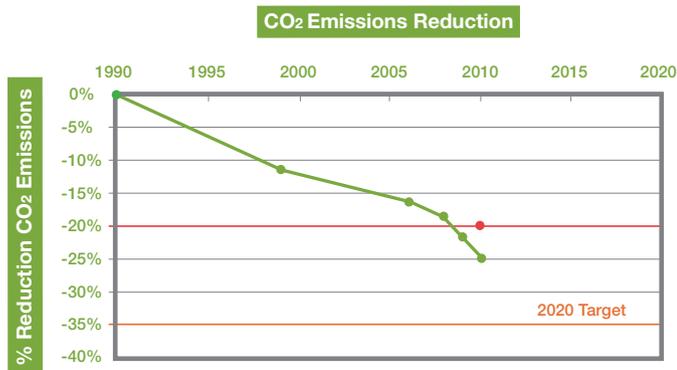
Reducing CO₂ emissions remains the cornerstone of the industry's efforts to increase the sustainability of food and drink manufacturing and contribute to the growth of a greener economy in the UK.

■ Our Commitment

To work collectively to tackle climate change by making an absolute reduction in CO₂ emissions of 20% by 2010 and 35% by 2020 against a 1990 baseline.

■ Progress Made

Our last progress report (based on 2009 data) showed cumulative savings of 21%, passing our 2010 milestone a year early. Latest figures for 2010 show we have actually achieved savings of 25%, while continuing to increase output – a substantial productivity gain.



FDf has continued to work with Government and a range of other partners to deliver year on year savings. In particular, we have worked with the British Standards Institution on revising methodologies for assessing the life cycle greenhouse gas emissions of goods and services (PAS 2050). We are a leading participant in the work of WRAP's Product Research Forum project to improve the availability and accuracy of wider

environmental impact data for consumer products. We are also participating in similar work at European level in the Food Sustainable Consumption and Production Roundtable.

Given the importance of incentivising further progress, we were pleased at the announcement in the March Budget that the existing food sector Climate Change Agreement will continue until 2023 at least. This provides a vital framework to support and measure what our members are achieving. The Department of Energy and Climate Change (DECC) is currently consulting on ways to streamline administrative arrangements and we are actively engaging in this process.

We have also continued to work with the Carbon Trust and others on the Industrial Energy Efficiency Accelerator (IEEA) programmes for the industrial bread baking and the sugar confectionary sectors. Stage 1 of the programme, to identify potential energy savings, has been completed and a number of companies have progressed to implementing identified solutions in Stage 2.

Our last report looked forward to a third IEEA programme covering the frozen and chilled food. But following the withdrawal of funding for this in the Government's Spending Review we are exploring alternative projects to support energy efficiency in these important sectors.

We also committed to review our reporting methodology for the CO₂ Ambition to align more closely with recognised publicly-available standards and to explore reporting of other greenhouse gases aside from carbon dioxide. This work is still ongoing as it depends on possible changes to the form of future Climate Change Agreements resulting from the DECC review and on developments in regulations relating to fluorinated greenhouse gases (F gases).

Zero waste to landfill

Sending food and packaging waste to landfill not only wastes the resources used in their production but also adds to total greenhouse gas emissions through decomposition. Even though most food waste is generated by households rather than manufacturers, FDF members recognise the need to lead by example in their own operations.

■ Our Commitment

To send zero food and packaging waste to landfill by 2015 at the latest.

To make a significant contribution to WRAP's Courtauld 2 target of reducing product and packaging waste in the supply chain by 5% by end of 2012 against a 2009 baseline.

■ Progress Made

A total of 21 FDF member companies have now signed up to Courtauld 2, a voluntary agreement launched in 2010 in succession to Courtauld 1, setting new and more challenging targets to reduce the impact of packaging and waste across the supply chain. WRAP's First Year Progress Report, published in December and covering achievements between 2009 (baseline) and 2010, shows that there has been a 0.4% (10,000 tonnes) absolute reduction in the amount of supply chain waste arisings across all signatories, 1.1% when adjusted for changes in sales volumes.

The progress recorded by FDF member company signatories providing data for this period equates to an absolute reduction of 6.9% in supply chain waste arisings and 3.1% when changes in sales volumes are taken into account. These figures show that whilst progress overall against the supply chain waste target has been relatively modest, FDF signatory companies appear to be performing well against the target. The WRAP analysis of waste arisings also shows that the largest reduction has come from a marked shift away from landfill and other disposal options. This is further evidence of the progress being made against our zero waste to landfill target. We are continuing to work with WRAP on supporting FDF member signatories and their supply chains identify ways of reducing waste from the outset – the first stage in the waste hierarchy.

A report on 'Opportunities for resource efficiency in the food and drink sector' based on the findings of the waste prevention reviews conducted by WRAP in 2009 at selected sites of 13

FDF member companies has recently been published.

One area highlighted in these reviews for further work was to look at the opportunity to increase the uptake of Production Ready Packaging (PRP) as a means to reduce packaging waste from incoming goods and improve production efficiency. A joint project was set up with WRAP involving member companies to explore the issues further including examples of PRP systems available, benefits and potential barriers. Other food companies and PRP technology providers were also contacted. WRAP are currently considering how best to disseminate the findings of this work.

WRAP have also released new estimates showing a sharp fall in the amount of food and drink waste generated by UK households. The figures show that the activities of FDF members and other Courtauld 2 signatories working alongside WRAP, local authorities and community groups have helped households to reduce the overall volume from 8.3 million tonnes in 2006/7 to 7.2 million tonnes in 2010, a fall of 13%. Avoidable waste is down 0.9 million tonnes from a baseline of 5.3 million tonnes in 2006/07, a fall of 18%. When analysed against the Courtauld 2 target of reducing UK household food waste by 4% by 2012 compared to 2009 (baseline) these estimates show that signatories have contributed to a reduction of 3% (or around 260,000 tonnes) over the first year of the agreement and are therefore well on track to meeting this objective.

We continue to encourage members to work with FareShare and other similar charities that redistribute surplus food and drink products to disadvantaged people in society. Preventing the waste of food which remains fit for consumption, even when no longer of commercial value, is all the more important in current economic circumstances.



Reducing the negative impacts of packaging

Packaging plays an essential role in the safety, quality and shelf-life of food and in conveying important information to consumers about issues such as use, storage, nutrition, ingredients and origin. In terms of environmental impacts, it contributes relatively little to the total product footprint. But it is a very visible use of resources and one which needs to be kept under constant review to ensure an optimal balance between function and impact.

■ Our Commitment

To make a significant contribution to WRAP's Courtauld 2 target of reducing the carbon impact of packaging by 10% by 2012 against a 2009 baseline.

To explore ways of developing a campaign of engagement with consumers to help them better understand the role of packaging and reduce its impact.

■ Progress Made

Regarding the Courtauld 2 packaging target, WRAP's First Year Progress Report for the period 2009 (baseline) to 2010 shows that across all signatories there has been a 5.1% absolute reduction in the carbon impact of primary and single use transit packaging (295,000 tonnes CO₂ equivalent). The progress shown by FDF member company signatories providing data for this period equates to an absolute reduction of 1.2% in carbon impact (22,600 tonnes CO₂ equivalent).

On a weight basis the WRAP results show that there has been an overall reduction of 6.9% (226,000 tonnes) in the weight of packaging; in comparison, the packaging of FDF signatories reduced by 2.7% (24,380 tonnes).

These achievements have been made despite estimated increases in sales volumes of around 2% over the period, decreases in UK recycling rates and increases in emission factors associated with transportation.

As one means towards increasing the quantity and quality of household packaging collected for recycling, a number of FDF members are continuing to support the 'On-Pack Recycling Label Scheme' run by the British Retail Consortium. To date 21 FDF members have signed up to the scheme.

Our work on developing a campaign of engagement with consumers has been taken forward in discussions within the multi stakeholder Packaging Resources Action Group (PRAG), and with the chair of the Government's Advisory Committee on Packaging. We are looking in particular at ways of increasing levels of recovery and recycling, as well as helping consumers understand the essential role packaging performs. As a spin off from these discussions, a core group of PRAG members including FDF and the ACP chair, have formed a steering group with WRAP to agree key messages on the role packaging can play in preventing food waste. Where appropriate, these messages will be used within WRAP's 'Love Food Hate Waste' initiative.



"The Five-fold Environmental Ambition continues to play a significant role in promoting waste prevention strategies for the food and drink industry, which is why WRAP is delighted to continue to support the FDF's initiative.

'FDF members have been instrumental in helping to shape both the Courtauld Commitment and Federation House Commitment (FHC), both of which are closely aligned to the Five-fold Environmental Ambition. Now in its second phase, resource efficiency is a major consideration for Courtauld signatories to factor into business objectives and we are delighted with the contribution that FDF members are making. The FHC also continues to go from strength to strength with the food and drink industry making good steps towards achieving the ambitious target of a 20% water saving by 2020.'

Dr Liz Goodwin, CEO, WRAP

Boosting water efficiency

The water used in the manufacturing process is a relatively small part of total water use in food production. But it has direct local impacts in the UK and is increasingly the focus of attention in relation to the overall balance of supply and demand for domestic and other purposes, and associated environmental impacts.

■ Our Commitment

To achieve significant savings in water use to help reduce stress on the nation's water supplies and contribute to an industry-wide absolute target to reduce water use (excluding that embedded in products) by 20% by 2020 compared to 2007.

■ Progress Made

Our ambition to reduce operational water use is delivered through the Federation House Commitment (FHC) launched in 2008 to improve water efficiency in the food and drink manufacturing sector. The commitment is a partnership between FDF and WRAP.

The third annual FHC progress report, published in October 2011, showed that in 2010 signatories reduced their water use (excluding that in product) by 5.3% compared to 2007 – equivalent to almost 1.3 million m³ or 520 Olympic swimming pools.

This reduction is all the more impressive given that production for these sites increased by 7.5% in 2010, whilst water use (excluding that in product) per tonne of product decreased by 11.9%.

In addition, between April 2010 and March 2011, 16 new signatories joined the FHC. This brings the total to 54 active signatories, across 245 sites throughout the UK, engaged in making on-site improvements to reduce their water use.

Signatories to the FHC have the opportunity to join peer working groups, make use of free one to one on-site support from technical advisors, and share best practice.

In 2011, FHC administrators reviewed all data submitted since the FHC was launched to clarify baselines and ensure

comparability and consistency in calculation and reporting. This has resulted in some corrections to previous data, and future progress will be reported on the new basis.

Beyond the FHC, FDF and its members are working with the British Standards Institution to help develop an ISO standard for a water footprint. We actively contributed to Defra's work on developing a Water White Paper.

As part of our new aims, we have also been looking at ways of improving water use and management throughout the supply chain. We are separately publishing a new guide – Every Last Drop – setting out practical advice for businesses on what can be done. Further details are set out on page 11.



Fewer transport miles

The contribution of transport to the environmental impact of food production is frequently over-estimated and in most cases accounts for only a small percentage of total footprint. But it does add directly to costs and also gives rise to a range of indirect effects, including traffic congestion. It is therefore a very clear example of where improved efficiency makes good business sense for everyone.

■ Our Commitment

To embed environmental standards in our members' food transport practices to achieve fewer and friendlier food transport miles.

To contribute to the Institute of Grocery Distribution (IGD) Efficient Consumer Response (ECR) Sustainable Distribution Initiative.

■ Progress Made

Throughout the year members have continued to embed environmental standards in their food transport practices, whether contracted out to third party hauliers or undertaken in house, to achieve fewer and friendlier food transport miles. This is reflected in many of the case studies in this report. The FDF 10-point checklist for Greener Food Transport remains the cornerstone of these efforts.

Following our review of the Five-fold Environment Ambition last year, we have now included a quantifiable target in our transport ambition in the form of FDF members making a contribution to IGD's ECR Sustainable Distribution Initiative target to save a cumulative 200 million HGV miles across the food and grocery sector over the period 2007-12.

FDF members are encouraged to calculate their savings using a Road Miles Savings Calculator provided on the IGD ECR website and submit this information to IGD. Savings of 163 million miles for the period 2007-10 have so far been recorded by IGD based on the efforts of manufacturers, retailers and wholesalers. IGD is due to issue a further progress update in early 2012.



FDF's 10-Point Checklist for Greener Food Transport

- ✓ Maximising vehicle loading
- ✓ High ratio of trailers to tractors
- ✓ Compliance with the latest EU emission standards
- ✓ Use of vehicle tracking technology
- ✓ Collaboration to reduce empty running
- ✓ Record and avoid difficult drop points
- ✓ Increase usage of rail and/or ship
- ✓ Encourage innovation and best practice
- ✓ Driver training
- ✓ Vehicle maintenance including retention of correct tyre pressures

The bigger picture

The environmental footprint of the manufacturing process represents on average less than 10% of the total end to end impact of food and drink production and consumption. That is why we concluded last year that we needed to expand the scope of our Ambition and set ourselves new aims which would extend our influence across the food chain and lead by example in helping to achieve sustainable growth. We also set ourselves some specific deliverables for 2011 in relation to:

- Water use and management in the supply chain
- Exploring the importance for food manufacturing of protecting and enhancing biodiversity
- Looking at how we might develop guiding principles for the sustainable sourcing of commodities, taking wheat as a first case study



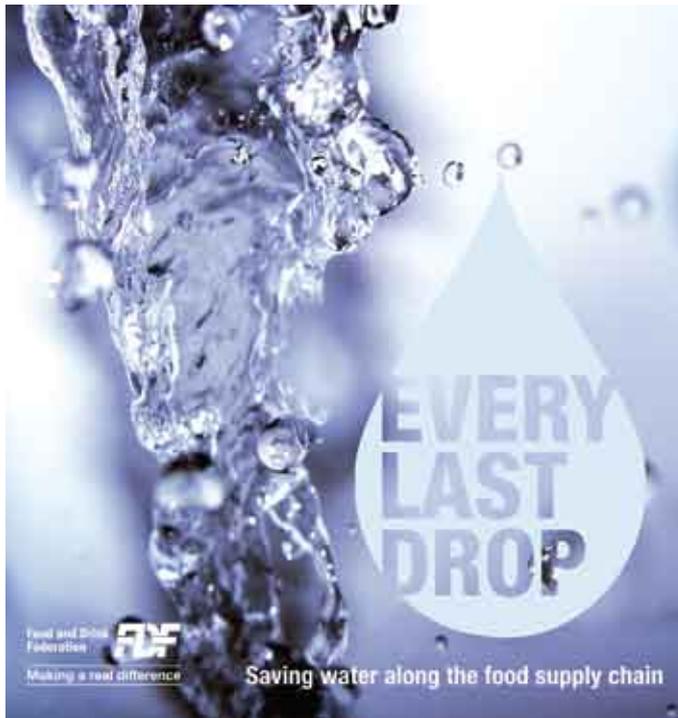
New aims agreed in 2010

- Our role as food and drink manufacturers is to supply consumers with safe, nutritious, appetising and affordable food and to help them make sustainable choices which will secure these benefits for the future
- We will lead by example, building on the success of FDF's Five-fold Environmental Ambition to extend our influence across the supply chain as part of a longer term food strategy
- We will work with our suppliers, customers, employees, policy makers and other stakeholders to develop the necessary information, skills and business environment to deliver continuous improvement in the use of energy, water and other natural resources to help address the pressing global issues of climate change and loss of biodiversity
- We will encourage the development of life-cycle thinking throughout the supply chain and try to remove systemic barriers to improving resource efficiency, from the sourcing of raw materials to the disposal of post-consumer waste
- We will promote innovation and technology to reduce waste and extract maximum value from the resources we use and to help consumers get the most from our products

Progress in 2011 against our new aims

Water use and management in the supply chain – ‘Every Last Drop’

Water is arguably the planet’s most precious and vital natural resource. The twin pressures of an ever increasing global population and the effects of climate change mean that all of us, whether at home or in the work place, share a responsibility to use it as efficiently as possible and with due regard to the needs of others. Only through such careful management will we be able to ensure that future demand is met and that the water environment and ecology it supports is safeguarded. These issues are particularly important for the long term sustainability of the food and drink industry because of its reliance on a supply of freshwater for both its raw material and processing needs.



As part of our wider work to improve environmental sustainability across the supply chain, FDF’s Water Working Group has developed a simple guide, entitled ‘Every Last Drop’, which provides a series of golden rules for food and drink manufacturing businesses – tailored for those with boardroom, supply chain and operational roles – on what can be done to save water and manage its use effectively along the supply chain, including as individuals at home. Alongside this guide we have also launched a new dedicated water page on our website (www.fdf.org.uk/water) giving further sources of help and information along with best practice case studies.

We intend that the launch of the guide will mark the start of a FDF campaign leading up to World Water Day in March 2012. The aim of the campaign will be to raise awareness within the industry, particularly among smaller and medium-sized companies. It will include provision of downloadable resources, workshops and webinars in support of the guide’s key messages.

“I warmly welcome this initiative from the members of the FDF Water Working Group to develop this simple guide as a first step to help food companies and individuals use water wisely along the supply chain. I would encourage all businesses and the people who work in the sector to take it on board.”

Rt Hon Lord Smith of Finsbury, Chairman,
Environment Agency



Sustainable sourcing of commodities – case study on wheat

Increasing food production sustainably presents a number of different challenges in respect of environmental, economic and social aspects at different points in the value chain. Only by taking an integrated view of the various risks and impacts will it be possible to deliver the kind of step change in performance which will be required to improve efficiency, increase resilience and reduce environmental impacts while also meeting higher demand.

A key strength of FDF's Five-fold Environmental Ambition has been its focus on practical solutions in a business context. With that in mind, we decided that the best way to approach the issue of how best to source the commodities we need was to take a specific example and see what wider lessons might be drawn. We were also conscious of the need for broader expertise in considering these issues and so sought the help of Forum for the Future to bring together a range of interested parties in a joint workshop held in London in October to improve understanding of current and future sustainability issues in the wheat value chain and explore ways of addressing these.

The major part of the workshop involved looking at trends and developments over the last 30 years and the factors that were thought to be significant for the future. A range of issues were identified, including: price volatility and rising input costs, increasing scarcity of key resources (in particular land, water and fossil fuels), climate change effects and the degradation of wider ecosystems. It then explored potential actions and opportunities in terms of better awareness and training in risk management, the role of science and technology and the need for more investment in applied research and improved information sharing and knowledge transfer to support better decision making.

The next stage of this work will be to look at how we might develop a set of principles as the basis for issuing best practice guidance to member companies, also taking account of parallel work on life-cycle assessment and criteria for environmental footprinting in the EU Sustainable Consumption and Production Roundtable and WRAP's Product Research Forum.



“Last year the FDF made an important commitment to extend its influence across the supply chain to help reduce the wider sustainability impacts of the food and drink sector, and help secure sustainable value chains, where systemic barriers to key issues such as resource efficiency have been removed. Forum for the Future has been delighted to help the FDF make progress towards achieving this ambition. Through organising a collaborative workshop with representatives from across the food and drink sector, we have identified action needed to deliver a sustainable value chain for the key commodity of wheat. We look forward to continuing to work with the FDF to help make these actions a reality.”

Dr Sally Uren, Deputy Chief Executive,
Forum for the Future



The particular importance of biodiversity

Food production depends on healthy ecosystems to provide essential natural resources, including soil and water. Key to these are the myriad animals, plants, insects and micro-organisms whose interactions help to purify water, recycle nutrients and maintain soil structure and fertility. As part of our work to look at environmental impacts across the supply chain, FDF held a joint biodiversity and ecosystems workshop with World Wildlife Fund (WWF) in July to improve members' understanding of the issues involved and to look at ways in which they might be addressed. The workshop was attended by a cross section of FDF members along with a number of key stakeholder groups including NGOs and Government.

Feedback from the workshop confirmed it was very successful in raising awareness and demonstrating why biodiversity is so important to future food security. However, it also illustrated a major current challenge that market mechanisms largely fail to capture the costs of biodiversity loss or to reward initiatives aimed at protection and enhancement. There are also examples where habitat destruction can lead to short term commercial gain, compounding the difficulties of trying to buy from certifiably sustainable sources.

The next stage for FDF is to articulate more clearly the business case for action, particularly in respect of the resilience of supply chains, and the instruments available for measuring and managing such risks.



“Biodiversity is fundamental to the work of WWF. So, we were delighted to have the opportunity to share our expertise with food industry stakeholders at FDF’s workshop in July, and help them understand the importance of measuring and managing ecosystem risks and benefits – and the impact this can have on supply chain resilience and the financial bottom line. We look forward to continuing to work closely with FDF as they develop their thinking on sustainable sourcing as part of their wider efforts to protect the natural capital and healthy ecosystems on which future food production depends.”

Anthony Kleantous, Senior Sustainability Adviser (Food),
World Wildlife Fund – UK

Looking to 2012: delivering sustainable growth

Looking ahead, it is clear that business as usual is no longer enough to deliver the changes we need, either to how food is produced or to what we buy and eat – and the continuing problem of tackling waste across the whole food system.

Food companies know that sustainability is integral to their future profitability, as is the need to increase resilience throughout their supply chains. Corporate actions also need to be matched by improvements in the policy and regulatory frameworks within which the industry operates. This will require a common understanding of what we mean by sustainable production and consumption in a resource-constrained world and how best to encourage and support behaviour change. This must be evidence-based and underpinned by agreed methodologies which take account of the enormous natural variabilities involved and the range of trade-offs in optimising outputs in relation to inputs. Rigid product standards and a one size fits all approach risk being counterproductive in such circumstances. Innovation and technology will also have a major role to play, though without mechanisms to reflect the cost of external impacts in product prices, there are likely to be issues of market failure to overcome in generating the necessary investments.

FDF is committed to working constructively in addressing these issues at national and international level, in particular through the work of Defra's Green Food project and in response to the European Commission's proposed Roadmap to a Resource Efficient Europe in the context of its Europe 2020 growth strategy. We will also be building on the outcomes of our two key workshops this year on biodiversity and sustainable sourcing to look at ways of developing practical guidance and promoting best practice on the lines of what we have already done for water. In addition we will be contributing actively to the negotiating processes for reform of the EU Common Agricultural and Common Fisheries policies, which govern the supply of many of the raw materials we use.



Case studies

- Aunt Bessie's (part of the William Jackson Food Group)
- Bettys & Taylors Group
- Coca-Cola Enterprises
- General Mills
- Kellogg Company (Portable Foods)
- Kraft Foods
- Macphie of Glenbervie
- Macsween of Edinburgh
- Mars (Chocolate and Food)
- Nestlé UK & Ireland
- Premier Foods
- United Biscuits
- Young's Seafood

Aunt Bessie's (part of the William Jackson Food Group)

- Achieved zero food and packaging waste to landfill
- Reduced of food waste by 25% and increased recycling by 28%
- Reduced absolute carbon emissions by 29.3% since 2005
- Continued to achieve fewer and friendlier food transport miles by using double-deck loads and backhaul opportunities
- Reduced specific energy consumption by 5.6%

"As part of the 160-year-old William Jackson Food Group, Aunt Bessie's is committed to enriching the environment where we operate and see the FDF Five-fold Environmental Ambition as a cornerstone to achieving this aim. Our success in sending zero food and packaging waste to landfill and our increase in the efficient use of resources is a strong first step on this journey."

Mark McDavid, Managing Director,
Aunt Bessie's



Aunt Bessie's has increased its recycling rates by investing in employee awareness

Aunt Bessie's is a family-owned business. In line with its business values it is mindful of the impact it has on the environment and takes responsibility for increasing the sustainability of all its operations, collaborating with partners along the supply chain to achieve the same goals. FDF's Five-fold Environmental Ambition provides a clear framework to help achieve these goals.

Aunt Bessie's has significantly reduced its year on year food waste from its manufacturing sites. This has been achieved by focusing on operational excellence combined with a specific training programme across the manufacturing function.

The company has made great strides in increasing its recycling rates by investing in equipment and employee awareness.

This has seen Aunt Bessie's achieve zero waste to landfill and make significant savings on waste costs.

The company has invested in various energy saving initiatives such as dew point compressors, T5 light fittings and speed drive compressors. This has helped reduce carbon emissions by 29.3% since 2005. In addition, Aunt Bessie's has implemented an in-house energy saving team to identify energy savings.

Working in partnership with its third party logistics company, Aunt Bessie's has continued to achieve fewer and friendlier transport miles: products are packaged and palletised to ensure maximum cube efficiency; double-decker trailers are used for distribution; and the backhaul of the transport is utilised to bring materials back to site. Primary distribution is consolidated at the third party logistics company to ensure maximum lorry load efficiency.

To maintain the good progress made Aunt Bessie's will continue to generate ideas to build awareness of sustainability and community engagement. The company aims to achieve the best outcomes for the human and natural environments within which its business operates.

Bettys and Taylors Group

Bettys and Taylors of Harrogate is an independent family-owned business specialising in fine teas and coffees and handcrafted cakes and confectionery. Its famous brands include Bettys Cafe Tea Rooms, Bettys Cookery School, Yorkshire Tea and Taylors of Harrogate coffee.

The introduction of variable speed drives on two tea packing lines is expected to reduce the company's CO₂ emissions released during the running of those particular machines by over 5,000kg a year - a reduction of 38% per machine. In addition a new warehouse has been constructed to maximise natural light use, with the majority of remaining electrical light needed run on motion sensors which in turn minimise energy consumption.

From November 2011 the Bettys Bakery is sending its food waste to a food waste recycling company to be composted and therefore diverted away from landfill. It is also supporting FareShare and donating any bread waste to the charity for distribution amongst communities in need. Bettys Cafe Tea Rooms have set up food donation schemes with local charities in Ilkley and Harrogate.

Through packaging innovation over the last five years the company can state that Taylors of Harrogate now has the lightest weight coffee film in Europe.

As a signatory of the FHC the company took advantage of a free site water audit which identified savings including renegotiating the non-return to sewer portion of the company's water charges.

Partly to reduce road miles, a new warehouse has been built closer to the Taylors Tea and Coffee manufacturing site. In addition, Bettys Bakery is now sourcing more local supplies of ingredients and packaging. This local sourcing is estimated to have reduced food miles by approximately 33,000 miles a year.

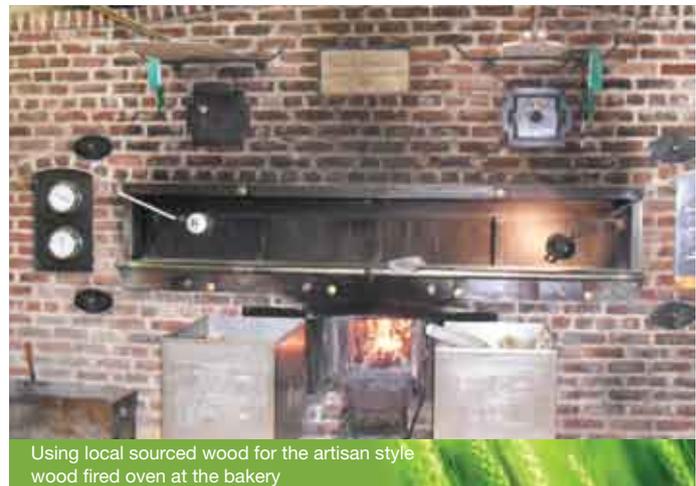
For 2012, Taylors of Harrogate will be looking to reduce pack sizes to enable the company to drive forward with its continual improvement on efficient and environmentally friendly packaging.

- Installation of variable speed drives on two packing machines at Taylors has been calculated to provide a 38% CO₂ reduction per machine
- Through packaging innovation Taylors of Harrogate now has the lightest weight coffee film in Europe
- Bettys Bakery achieved zero food waste to landfill in 2011
- Saved over £1000 per year in water charges
- Bettys Bakery has saved 33,000 road miles a year through local sourcing

"Bettys & Taylors is a globally responsible business. This report gives a flavour of the efforts by teams across the business to realise this and fulfil our part in achieving FDFs Five-fold Environmental Ambition."

Jamie Hutchinson, Group Health, Safety and Environment Manager, Bettys and Taylors

BETTYS & TAYLORS GROUP LTD
AN INDEPENDENT FAMILY BUSINESS



Using local sourced wood for the artisan style wood fired oven at the bakery

Coca-Cola Enterprises

Corporate responsibility and sustainability is at the heart of the way Coca-Cola Enterprises (CCE) does business – growing more while using less - and using its brands to encourage consumers to make sustainable choices.

On key issues such as recycling, energy and water use and waste reduction, CCE believes it is moving in the right direction.

In CCE's facility at Sidcup it installed a Ground Source Heat pump that it estimates will produce year-on-year carbon savings of around 1,612 tonnes. CCE also replaced a large quantity of its standard fluorescent light tubes at Sidcup with new LED technology saving around 197 tonnes of CO₂ per year.

CCE was the first to trial a dedicated biogas heavy goods truck in the UK logistics sector. It expects the truck to generate carbon savings of up to 65%, compared to conventional diesel. In 2011 CCE invested £1.7million in a fleet of 14 dedicated biogas vehicles. CCE installed rainwater harvesting at its site in Northampton, where a 20,000-litre harvesting system is being used for vehicle washing, warehouse floor cleaning and flushing toilets.

In 2011 CCE announced a joint venture with ECO plastics to develop the largest PET plastic recycling facility in western Europe. The new facility will more than double reprocessing of PET plastic bottles in this country to 75,000 tonnes. The new company is known as Contium Recycling Ltd. CCE launched Recycle Zone in 2008 with the aim of setting up 80 branded Recycle Zones by March 2011.

To date there are 130 static and event-based Recycle Zones, which have collected over 338 tonnes of recyclate.

CCE will continue to install its energy management system and LED lights in its coolers and vending machines. The company will continue to reduce its water use ratio to its target of 1.3 litres of water used per litre of drink produced by 2020. Following the recent launch of PlantBottle packaging in September 2011, a fully recyclable PET bottle made with 25% rPET and up to 22.5% plant-based materials, CCE will distribute 200 million packages this year.

- Achieved a 5.5% reduction in CO₂ since 2007 and received the Carbon Trust Standard Award in recognition
- Water use ratio of 1.36 litres for every litre of product made – a 4.9% reduction since 2009
- 130 Recycle Zones collected over 338 tonnes of recyclate since the scheme launched in 2008
- Invested £1.7 million in a fleet of 14 biogas vehicles
- Averaged 14% recycled content in its PET bottles and plans to more than double reprocessing of PET plastic in the UK

“Sustainable growth is about making more with less. We are making good progress, growing our business while achieving absolute reductions in our carbon emissions and the water we use. We have a clear vision, but it is a long road and we know that there will always be more to do.”

Simon Baldry, Managing Director,
Coca-Cola Enterprises Ltd



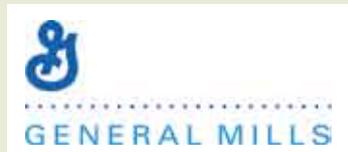
Coca-Cola Enterprises

General Mills

- Transports 90% of its product by sea
- Has cut 2.3 million road miles per year
- Now consolidates container packing for products which maximises container space and saves on road miles

“As with all our environmental schemes – whether it be a sophisticated water reduction programme at our Jus-Rol factory in Berwick or simply stacking product higher on pallets throughout our European operation – we are committed to continually looking at new ways to make improvements.”

Dave Howorth, Supply Chain Director,
General Mills UK & Ireland



By consolidating its container packing for products produced at its Spanish and French production operations at a single site in Bilbao, General Mills is continuing to make its European distribution operation even more environmentally friendly. This new initiative is called ‘Project Together’.

The company had already cut 2.3 million road miles per year from its UK-bound consignments of Green Giant sweetcorn, Old El Paso Mexican meal kits and Nature Valley cereal bars, as a result of its decision to transport at least 90% of product by sea.

Further environmental benefits arise from consolidating container packing at a single site meaning that the lighter products produced at its sites in northern Spain can now be packed with the heavier, canned products produced in south west France.

Previously, containers would be loaded at the company’s Spanish and French factories and then transported to Bilbao before being sent as sea freight to the UK. Containers for the French factory would be full from a weight perspective and containers from the Spanish factory would be full from a cube perspective.

Consolidating container packing at a single site means the company can maximise container space and further save on road miles when product arrives in the UK.

This initiative will improve container utilisation and also allow for the direct shipment of a greater volume of product directly to Ireland rather than via the UK, thereby generating the reduction of a further 150,000 road miles.

General Mills is committed to protect and conserve the natural resource base the company’s business depends upon by continuously improving its environmental performance. The company is currently in the process of developing and extending its next set of sustainability goals.



Consolidating packaging at a single General Mills site maximises space and saves road miles

Kellogg Company (Portable Foods)

At the company's Wrexham snack plant:

- Successful use of Lean Manufacturing Principles to drive water and energy efficiency
- 33% reduction in energy use per tonne of food produced since 2009
- Sub-metering has helped to significantly reduce water use
- 47% reduction in waste to landfill and on target to achieve zero waste to landfill in 2012

"As a global food company, natural resources are at the core of our business. Clearly, we have a stake in helping to ensure a healthy environment and abundant natural resources for generations to come. That's why we are committed to conducting our business in a way that reduces our environmental impact."

John Bryant, President and Chief Executive Officer, Kellogg Company



Through the implementation of Lean Manufacturing Principles and Techniques across the business, Kellogg Company is identifying opportunities for savings in energy and water use, as well as waste minimisation.

Portable Foods, a Kellogg wholly owned subsidiary, operates the snack plant in Wrexham which makes brands such as Rice Krispies Squares. The plant has focused on reducing changeover times and creating increased production capacity within the plant.

The same amount of food is now being produced in 18% less time and this has helped reduce energy use by 33% since 2009.

Since June 2010, the plant has introduced eight submeters to monitor areas of high water consumption. One of these meters immediately identified a belt washer which was overusing water by 75%. The site was able to reduce water use at this beltwasher from 168m³ to 42m³ in one week. The sub-metering also helped identify a concealed water leak that was taking 20% of the total water use. To date, as a result of the new metering the site has achieved a reduction in water use of 17%.

The plant has also reduced waste to landfill by 47% per tonne of food produced since 2005, achieved through continued focus on segregation of waste in the plant and increased awareness and engagement from the workforce. By 2012 the plant will have achieved zero waste to landfill.

While the plant has already met the Kellogg Company 2015 global targets for energy, water and waste reduction, the Lean Manufacturing team will continue to drive down changeover times within the plant, improving throughput and resource efficiency as well as minimising waste.





Kellogg Company's implementation of Lean Manufacturing Principles has improved resource efficiency

Kraft Foods

As a leading food company in the UK and Ireland, Kraft Foods is proud to make and look after so many well-loved brands and products that have delighted UK consumers for more than a century, like Cadbury, Philadelphia, Kenco, Halls and Oreo.

Energy efficiency and emissions reduction have been achieved through investment in burners and control systems for steam raising boilers. The company has identified reuse of heat in waste flue gases and segregation of low grade heat streams as increasing opportunities for reuse of heat. As Kraft Foods move more and more spent materials up the waste hierarchy, it is finding new approaches to eliminate waste, including through reuse, and to maximise opportunities for recycling. Improved segregation and investment in balers enables commercially viable recycling and is complemented by novel reuse projects such as cardboard boxes being given a second life by a domestic removals business.

The company's most consumer engaging projects in 2011 include: changes to its boxed Easter eggs packaging and a makeover of its Kenco coffee jar.

The new design of the boxed Easter eggs eliminates the plastic thermoform achieving around 10% weight reduction and significantly reducing the carbon equivalent of the packaging.

The medium boxed egg now uses around half of the packaging of five seasons ago. Improved design of the new Kenco coffee jars now uses 7% less glass. Investment in membrane technology allows Kraft Foods to reuse water which would otherwise have been discarded.

The company's transport projects such as double stacking are increasing vehicle utilisation and packaging changes increase pallet utilisation. Its transport providers are also investing in more efficient vehicles and trailers. Kraft Foods recently announced sustainability priorities and targets for 2015 to maintain the company's focus on delivering improvements in manufacturing and distribution efficiencies and less and better packaging. To extend the reach of its sustainability programme beyond its own operations, Kraft Foods has also added a target to further increase sustainably sourced commodities.

- Saved over 10,000 tonnes of CO₂ per year through investment in efficient generation and use of waste heat
- Achieved zero waste to landfill at one manufacturing site
- Over 1,000 tonnes of packaging avoided so far this year with new products in the UK
- Saving around 35 million litres of water a year
- 10% per pallet reduction in CO₂ emissions associated with efficient storage and distribution

"Our sustainability journey has put us on a path that is making a real difference. We're focusing on those areas where we can have the greatest impact and that mean the most to our business performance. Globally we have made significant commitments to reducing energy, carbon emissions, water, waste and packaging through our 'Better World' sustainability programme. Our UK manufacturing facilities are delivering projects across each aspect of our sustainability programme and making a significant contribution to the Five-fold Environmental Ambition."

Nick Bunker,
President UK & Ireland,
Kraft Foods



Kraft Foods' new membrane plant treats water for reuse in cooling towers

Macphie of Glenberrie

- Through review and redesign 10% of packaging materials have been saved in the last 18 months
- Energy requirements to be sourced from renewables (wind and biomass) by 2013
- Introduced a stepped approach to reducing water and energy use per tonne of production, year on year
- Operates a 1.2MW biomass plant, using locally-sourced woodchips as fuel – saving 2,100 tonnes CO₂ per year
- Switched to reuseable transit packaging instead of single use corrugated trays

“Being a sustainable business is not just about ticking boxes, it’s about taking action. We have ambitious growth plans for our business, which are based on a long-standing commitment to the environment and robust environmental management policies, which are enshrined into our business practices.”

Alastair Macphie, Chief Executive,
Macphie of Glenberrie



Food ingredients manufacturer, Macphie, has the principles of preventing pollution and continuous environmental improvement at the heart of its business. This has involved energy and water saving initiatives, renewable energy generation, minimising packaging waste and working towards zero waste to landfill by 2015. The comprehensive approach to environmental management undertaken by Macphie encompasses a number of sustainability targets.

Over the past 18 months Macphie has carried out an ambitious programme to optimise its total packaging usage, resulting in a reduction of 10% in the amount used. The programme involved packaging reviews, re-design and reduction. Some industrial customers have benefitted from less packaging waste to dispose of, easier manufacturing operations and in some cases a move to zero-corrugated returnable units. As a result, over 80 tonnes of corrugated and plastic weight has been eliminated from the supply chain.

Macphie became the first food ingredients manufacturer in Scotland to use renewable energy generated from biomass.

The company operates a 1.2MW biomass plant, using locally-sourced woodchips as fuel, providing steam for the food production processes. This carbon neutral process reduces the company’s CO₂ emissions by 2,100 tonnes per year. Plans are in place to install two wind turbines in 2013 that will supply electricity directly into the site and reduce CO₂ emissions by a further 8,000 tonnes. In 2011 Macphie implemented a stepped approach to reducing energy and water use per tonne of production through various efficiency measures. The company has set itself a target of sending zero waste to landfill by 2015. To achieve this Macphie plans to eliminate waste at source, including through reuse, and then recycle what it cannot prevent/reuse.

Macphie has a number of forward-looking targets that it plans to deliver in the near future, including sourcing all of its energy requirements from renewables by 2013, improving water and energy-use efficiency and sending zero waste to landfill by 2015.



Macphie uses locally-sourced woodchips as fuel for the food production process

Macswveen of Edinburgh

- Piloting innovative approach to reporting environmental data
- Moving to zero landfill operation in 2011
- Scrutinising supplier environmental performance
- Enhanced employee training
- Continuing to roll-out energy efficiency measures

“Macswveen has expanded the market for haggis while remaining true to family values. We created the first commercial vegetarian haggis and more recently launched microwavable versions of our haggis and black pudding. I am proud of the fact that we have done this with enthusiastic employees and a clear commitment to sustainability.”

James Macswveen, Director,
Macswveen of Edinburgh



Macswveen employees can take on specialist skills such as being a 'green champion'

Macswveen sees no obstacle to a small company embracing sustainability. In fact, it exemplifies the positive benefits that such commitment brings, in terms of reduced costs, motivated employees, stronger management control, greater competitive advantage and an enhanced reputation and brand. This has been achieved against a backdrop of growing sales and growing market penetration.

Throughout 2010 Macswveen invested in new machinery to cope with rising demand. The company also commissioned an integrated production and ordering system, which is helping to keep track of raw materials and products, thereby reducing waste and promoting resource efficiency.

The remaining 10% of waste sent to landfill consists of plastic that has been in contact with haggis ingredients.

In 2010, Macswveen piloted the recycling of this waste and plans to instigate a full commercial arrangement, making the company 'zero landfill' by the end of 2011.

To support these efforts, Macswveen commissioned a Zero Waste Scotland Packaging and Waste Prevention Review in April 2011.

In 2010 a new training ladder and career road map was created. This has enhanced the opportunities for employees in the production teams to learn and take on specialist skills such as 'green champion', fire warden, first aider, relief driver or forklift driver. Employees are also given opportunities to achieve Scottish Vocational Qualifications.

Macswveen recently expanded the environmental performance section of its overall supplier questionnaire. The company has sought verification of policy statements and environmental management systems. It is planning to build on this initial response by encouraging suppliers to further reduce environmental impacts and provide more detail on how this is being achieved.

Macswveen will continue to reduce energy use, water use and waste per tonne of haggis, even as total production volumes increase. At the same time, the company will continue to talk about its environmental performance, employee and community engagement. In 2011 the company piloted an online, real-time environmental data management and reporting system.

Mars (Chocolate and Food)

The company's approach to environmental sustainability is led by its commitment to the Five Principles of Mars – Quality, Responsibility, Mutuality, Efficiency and Freedom. By putting these principles into action Mars aims to make a difference to people and the planet through its performance.

In 2008 the company set out a target of eliminating factory waste to landfill by 2011. This has now been achieved for Mars Chocolate and Mars Food is making good progress.

The project has involved each manufacturing site looking at the waste generated and moving it up the waste hierarchy; out of landfill to either recovery, recycling, reusing or reducing.

To date, Mars has reduced the production waste sent to landfill by over 1200 tonnes per year.

The main activities for Mars Chocolate were understanding the value of waste generated and educating employees to see waste as a value to the business and not just a cost. To date, Mars' Slough site currently reuses and recycles over 90% of its site waste.

Mars Food started using anaerobic digestion in early 2011 and to date over 220 tonnes have been diverted away from landfill.

Recycling levels continue to increase – all soft plastic, buckets and drums are recycled along with wood and metal, once they have reached the end of their life.

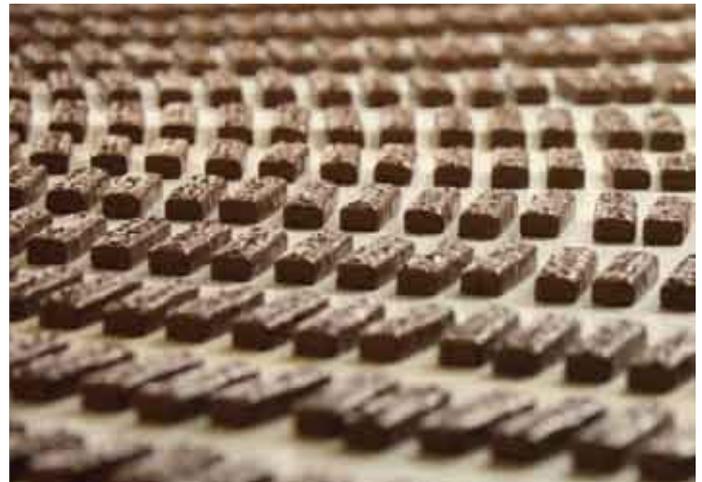
By removing the need for landfill the company has reduced the environmental and social costs to the communities in which its sites are located. Focusing on this target within its factories has also reduced office waste, which is now also being diverted from landfill. All Mars' offices have recycling bins and signage to encourage employees to take responsibility to segregate their waste.

The company is now working on additional ways to reduce the waste generated and to recycle and reuse as much as possible. As technology develops, additional recycling and reuse streams will be utilised.

- Over 1200 tonnes of production waste has been diverted from landfill since 2010
- Mars Chocolate has eliminated sending waste to landfill and currently reuses or recycles over 90% of its site waste
- Mars Food is on course to reduce landfill waste to 25% by the end of 2011

"This project is a great example of our principles in action. We are really proud of our waste reduction achievements to date and are continuing to find further ways to reduce the waste we generate in addition to moving it up the waste hierarchy."

Dale Creaser, Supply Chain Director,
Mars Chocolate UK

Mars Chocolate has eliminated sending factory waste to landfill

Nestlé UK & Ireland

Nestlé has accelerated its great progress with the FDF Five-fold Environmental Ambition through a number of initiatives which are underpinned by creating value for employees, shareholders and society as a whole. Whether reusing coffee grounds in Nescafé factories as fuel, reducing packaging or eliminating waste – the company takes its responsibilities very seriously.

Nestlé UK has made significant progress against sustainability targets and all factories have been ISO 14001 certified for environmental management. Water usage has been reduced by 36% since 2006 - ahead of the company's 2020 target. This was achieved through projects such as the installation of a waste treatment plant at its Girvan site.

By 2009 Nestlé had reduced energy use by 7% (since 2008) and carbon by 11% (since 2006). Its Halifax factory reduced water use by 52% and CO₂ emissions by 50% by changing the use of heating and cooling systems. At the Hayes and Tutbury factories spent coffee grounds supply nearly 20% of energy needs. The company has a target of zero total waste to landfill by 2015 for its factories. Three of its sites so far have achieved external verification for this, most recently its York factory where Kit Kat is manufactured. Nestlé also works with the charity FareShare to redistribute surplus food to disadvantaged people.

By 2009, the company had reduced the environmental cost of logistics (carbon emissions and noise) by 12%. Between 2010 and 2011, 415,000kms of truck traffic was removed through improved vehicle utilisation and increased collaboration with customers, suppliers and competitors. Nestlé is a signatory of WRAP's Courtauld 2 and 91% of Nestlé's packaging in the UK is recyclable. Packaging has reduced by 13% since 2006 and in 2009 the company became the first confectionery manufacturer to replace non-recyclable plastic with recyclable cardboard in 20 million Easter eggs. Packaging weight in medium and large Christmas selection boxes has also been reduced by 40%.

Looking to the future, Nestlé is working with partners such as the Wildlife Trust to encourage biodiversity at each of its sites such as its butterfly meadow at its Fawdon factory. It is also partnering with milk suppliers to establish sustainable practices to reduce environmental impacts. It is investing in renewable energy and establishing low carbon sites and the company is implementing anaerobic digestion on site to accelerate water reduction programmes.

- 11% reduction in carbon emissions since 2006
- Reduced total waste to landfill by 57% since 2008. Three Nestlé factories have achieved external verification as sending zero waste to landfill
- Packaging reduced by 13.1% since 2006
- Reduced total water consumption by 36% since 2006
- Reduced environmental impacts of logistics by 12% since 2006

"At Nestlé we believe that to enhance and protect our business, we must safeguard the wellbeing and future of our employees, suppliers and consumers while ensuring we protect the planet's resources for future generations. We call this Creating Shared Value."

Paul Grimwood, Chairman and CEO,
Nestlé UK & Ireland





Nestlé established a butterfly meadow at its confectionery factory at Fawdon, near Newcastle to encourage indigenous wildlife to return to the site and act as indicators of its environmental fitness

Premier Foods

Bob Spooner, Group Operations Director at Premier Foods, stated that the company is absolutely committed to continuously improving its environmental performance, with a focus on everyday operations. "Our internal Five Star Environmental Programme is central to the delivery of this commitment and throughout the year it has produced tangible results.

In 2010, we exceeded all the key environmental targets we set in 2009 which included reducing the waste we sent to landfill by a further 9,600 tonnes from 19,800 tonnes to 10,200 tonnes, representing a 48% year on year reduction."

In order to support the delivery of the commitments in the Five-fold Environmental Ambition, Premier Foods developed its Five Star Environmental Award Programme. Launched in 2009, this programme is fundamental to the delivery of Premier Foods' environment strategy. The programme provides the framework through which environmental performance improvement is encouraged, delivered and measured. Tangible benefits obtained through the programme include: cost reduction; risk reduction; identification and communication of environmental best practice; active engagement of local management and employees; encouragement of positive relationships with local communities; enhanced corporate and brand images.

The Five Star Award Scheme comprises five key categories:

- Leadership and Commitment
- Environmental Risk Management
- Energy and Carbon Management
- Waste Management
- Water Management

The programme has effectively raised the profile of environmental management, and the desire to improve environmental performance, throughout Premier Foods. In 2010, it delivered measurable performance improvement throughout all the company's manufacturing sites and key categories. In 2011, Premier Foods established equally challenging environmental objectives to: reduce energy consumption, CO₂ emissions, delivery miles, water use, and the carbon intensity of its packaging. The company looks forward to sharing its performance against these targets in coming years.

- Energy consumption reduced 14% between 2007 & 2010
- Carbon equivalent emissions (CO₂e) reduced 19% between 2007 & 2010
- All waste arising sent to landfill was reduced an overall 72% between 2007 & 2010
- Factory water use reduced 10% between 2007 & 2010
- Actual road delivery miles travelled reduced by 11% between 2009 & 2010

"Premier Foods' aim is to ensure sustainability in everything we do. We are aware of our responsibility to the environment and we're committed to reducing the overall environmental impact of our operations by monitoring, managing and continually improving our environmental performance. We will achieve this by providing a comprehensive framework of good environmental management practices that are embedded across the Group."

Mike Clarke, CEO,
Premier Foods



Premier Foods has set objectives to reduce the carbon intensity of its packaging

United Biscuits

- 28% reduction in factory carbon emissions since 1995
- 12 sites now achieving zero waste to landfill
- Packaging reduced by 13% since 2003
- Water use reduced by 40% since 2007
- Transport CO₂ emissions reduced by 33% since 2005

"UB is a proud contributor to FDF's Five-fold Environmental Ambition. Environmental sustainability is a vital part of our business and we continue to build on the strong progress we have made to date. Factory and vehicle carbon emissions and water use are all down again so far this year. In addition, we now have 12 of our 14 UK sites sending zero waste to landfill."

Benoit Testard,
Chief Executive,
United Biscuits



United Biscuits (UB) has continued to make great progress under the Five-fold Environmental Ambition over the last year. The biscuits, snacks and cakes manufacturer has already made major energy, water and transport reductions and is now well on the way to achieving its target of zero waste to landfill across all its sites.

Through the introduction of improved energy management systems, measures were identified such as reducing oven start-up times, which helped the company reduce carbon emissions by 28% compared to 1995, with a further reduction of around 5% so far in 2011. Innovative new oven burners using 15% less gas are being steadily rolled out.

The company sends zero food waste to landfill and since 2006 has reduced its other waste to landfill by around 95% by a mixture of prevention and recycling methods.

Packaging improvements have continued by, for example, introducing a more compact packaging format for Hula Hoop multibags. This resulted in a 70 tonne per annum reduction in plastic film, a 14% reduction in corrugated cardboard and with improved pallet fill, a reduction of over 500 lorry journeys a year.

UB continues to make strides to reduce water use against its increased company target of a 45% reduction by 2020. This is a result of employee engagement, small improvements and a major investment in a water recycling plant.

Success in reducing UB's transport emissions has been partly due to converting its waste vegetable oil into biodiesel, improving lorry load efficiency, transport collaboration and additional training for its drivers. As a result mileage has reduced by a quarter and carbon emissions by a third.

Building on the strong progress it is making in improving its own operations, UB is now looking increasingly to its supply chain to support farmers and other growers improve their environmental performance. UB is already one of the first manufacturers in Europe to source certified sustainable palm oil that is segregated throughout the supply chain.



UB's water recycling plant has helped the company reduce water use

Young's Seafood

- 18% reduction in Group carbon dioxide equivalent since 2007
- Zero food waste to landfill achieved
- 800 tonnes of carbon dioxide equivalent removed from packaging supply chain
- Group water use reduced by 41% since 2007
- Fork truck diesel fleet replaced with LPG trucks

"Young's has embraced the FDFs Five-fold Environmental Ambition since its launch in 2007. We will continue our support and set internal challenging targets in our 'Relentless Pursuit of Zero' waste. We will also continue to invest in people and our award-winning manufacturing Excellence Programme which continues to deliver additional waste reduction opportunities."

Steve Lidgett, Group Operations Director,
Young's Seafood



With a history spanning over 200 years, Young's Seafood is the UK's leading supplier of frozen and chilled, branded and own-label fish and seafood to customers and consumers. Drawing on its expertise in fish processing and manufacturing excellence, the company continues to reduce its environmental impact year on year.

Each Young's site has an energy team, which meets on a monthly basis to review an ongoing action log overseen by the factory manager. This employee engagement has been highly successful and has generated a number of blue sky ideas.

As part of an ongoing programme, the company is fitting passive infra-red and microwave detection to all lighted areas. Combined with the use of more energy efficiency tubes and lamps this has already had a measurable benefit in terms of reducing energy consumption, with an expectation of payback within 18 months.

It is expected that 300 tonnes of carbon dioxide equivalent will have been saved through lighting initiatives alone in 2010.

Young's was one of the original signatories to the Federation House Commitment. It set its own water reduction target of a 20% reduction by 2020, but has already exceeded expectations and achieved a 41% to date, equating to 232,944 m³ of water saved.

No food waste from any of Young's' operations goes to landfill and the company is committed to sending zero packaging waste to landfill by 2013. This has been an area of focus over the course of 2010 and all the waste generated at its Grimsby sites now avoids landfill.

Young's will continue to build on this strong environmental record. It has set tough yearly targets for the next five years and remains a strong supporter of FDF's Five-fold Environmental Ambition.

FDF is part of an Industry Alliance consisting of the European Fish Processors and Traders Association (AIPCE), WWF and organisations representing retailers, chefs and cooks working to secure radical reform of the Common Fisheries Policy and to end the unforgiveable waste of resources caused by discarding perfectly edible fish at sea.

'A Shared Vision for Sustainable European Fisheries' is the Alliance's vision document for reforming European fisheries to benefit fish, fishermen and fishing industries.

FDF's seafood group, includes Birds Eye Iglo, Icelandic, New England Seafood International, Seachill and Young's Seafood.



About FDF

The Food and Drink Federation is the voice of the UK food and drink industry, the largest manufacturing sector in the country.

FDF's membership comprises manufacturers of all sizes as well as trade associations dealing with specific sectors of the industry.

Our role is to help our members operate in an appropriately regulated marketplace to maximise their competitiveness.

We communicate our industry's values and concerns to Government, regulators, consumers and the media. We also work in partnership with key players in the food chain to ensure our food is safe and that consumers can have trust in it.

In representing the interests of our members, we are focusing on four core priorities:

- Food Safety and Science
- Health and Wellbeing
- Sustainability
- Competitiveness



Delivering Sustainable Growth

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