At British Sugar, we are passionate about sustainability...

...it makes good sense for our business, our people and our planet, challenging us to make commercial decisions which benefit all three areas simultaneously.

Our commitment to sustainability encourages us to improve our use of raw materials, which in turn increases the efficiency of our business.

British Sugar continues to be recognised as one of the most efficient sugar producers in Europe and over the past year, an increasing number of our customers and stakeholders have expressed an interest in learning more about how we achieve this.

In response to these requests, we have put together a report which shares British Sugar’s achievements to date, our targets and our focus for the future. Wherever possible, we have included specific examples to illustrate our approach and assist best practice.

Sustainability by its very nature brings both challenges and opportunities to a business. We will continue to drive efficiency at British Sugar and deliver solutions which benefit the environment, our stakeholders and the communities in which we operate.

We would be pleased to receive your comments and feedback on our Sustainability report, which can be emailed to: sustainability@britishsugar.com.”

Gino De Jaegher
Managing Director, British Sugar UK & Ireland
2. Use of raw materials

Located in the East of England and East Midlands, our operations are focused around using raw materials efficiently and responsibly. We are recognised as one of the most efficient sugar manufacturers in Europe and have developed a highly integrated method of manufacturing, designed to maximise efficiency and avoid unnecessary waste.

Basic sugar production remains at the heart of our operations, but we’ve added extra steps to the production process to capture every part of our raw materials and reuse them. Together, our factories extract over 1 million tonnes of sugar from homegrown sugar beet between September and March every year.

Upon arrival at our factories sugar beet passes through machinery which ‘catches’ stones, but allows the beet to float over the top. The beet is washed whilst soil and weeds are also captured. We recycle stones for building materials, soil for landscaping and compost vegetation, whilst lime (containing important trace elements) is used for soil conditioning and sold under the LimeX brand. In fact, beet growers can drop off their sugar beet at our factories and collect a backload of LimeX at the same time, reducing their fuel outlay and emissions.

After sugar is extracted from sugar beet and crystallised, the remaining beet fibre is dried and compressed into animal feed pellets. Residual syrup is separated, generating 3 more products; a sugar stream, betaine and raffinate. Our Wissington factory has become the largest producer of natural betaine in the world and betaine liquid can be found in healthcare products such as shampoo, moisturisers and cosmetics, or as a supplement in fish food. Raffinate has been used as a valuable animal feed supplement for a number of years.

In 2007 we used the same residual syrup as a feedstock to produce a brand new product at our Wissington Factory, opening the UK’s first bioethanol plant. Today the bioethanol refinery produces 55,000 tonnes of renewable fuel each year.

Using power from Wissington’s onsite Combined Heat and Power (CHP) plant and fed through our existing sugar operations, British Sugar’s award-winning bioethanol plant has been recognised as producing a ‘good biofuel’ and offers a CO2 emissions saving of over 70% relative to petrol when measured on a full life-cycle basis.

£1 billion investment

We’ve invested around £1 billion in the last two decades to continuously improve our use of raw materials, installing leading technology in energy efficiency, gas and water treatment. This substantial investment has increased our operational agility and enables us to explore new and exciting product stream opportunities. We even use combustion gases and recovered heat from Wissington’s CHP plant to grow over 80 million tomatoes annually.

“One of the most efficient sugar manufacturers in Europe”

Preparing a beet field for planting, beside our Wissington factory.
Today British Sugar UK is proud to produce over 2.3 million tonnes of products every year, but we generate less than 4,000 tonnes of waste. We remain committed to using raw materials responsibly, increasing our efficiency and reducing our waste still further.

Growing Norfolk tomatoes

British Sugar produces over 80 million tomatoes every year at our Wissington sugar factory and they help us to reduce carbon emissions and increase our energy efficiency. Supporting a process of continuous improvement, we routinely seek innovative ways to minimise waste and maximise value. At Wissington, we identified that our supply of carbon dioxide, heat and water could be better exploited if we used it again. So in 2000, British Sugar built the Cornerways Nursery on 5 hectares of land next to the Wissington factory.

Benefiting from its proximity, hot water is piped from the factory’s CHP plant to the glasshouse to maintain the balmy temperatures which best suit tomato plants. This hot water would otherwise be destined for cooling towers and released as steam, so the scheme ensures that this heat is used twice. In order to prevent heat loss from the glasshouse at night, our engineers installed blinds which keep in the day’s heat.

Using CO₂ for photosynthesis

Tomatoes use a large volume of the gas in photosynthesis, so at Cornerways, carbon dioxide (produced as a by-product from the CHP boiler) is pumped into the enormous glasshouse. At a concentration four times higher than that of normal air, the plants can use the carbon dioxide to grow at twice the normal rate. The glasshouse is also home to over 5000 bees which pollinate the plants naturally.

Recycling water

A glasshouse the size of 10 large football pitches has a very large roof, and we use it to capture rainwater as the main source of irrigation for our plants. Similarly, water which has been used primarily to wash the sugar beet is recycled to irrigate the tomato plants, carrying important nutrients from Norfolk soils.

Our aim was to produce a crop of tomatoes each year between April and November. It has proved to be a major success, winning many national awards and demand was such that in 2007 a further expansion more than doubled the existing glasshouse to 11 hectares. Due to the effectiveness of the original blinds, the glasshouse requires no more energy today than it did when it was half the size.

Results

Today, 10 years on, Cornerways Nursery grows around 80 million ‘eco-friendly’ tomatoes annually. It has become the largest single tomato glasshouse in the UK. Our tomatoes are sold through the major retailers, food service suppliers and local businesses, including the Royal Estate at Sandringham. Now holding the Red Tractor mark of accreditation, the British Retail Consortium Quality Scheme Approval, the Tesco Nature’s Choice Gold Supplier award and having recently appeared on the BBC programme ‘Jimmy’s Farming Heroes’, the tomatoes from Cornerways Nursery have proved an innovative, sustainable and profitable solution for British Sugar.
3. Water

Sugar beet is a root crop which is made up of sugar, fibre and contains a large amount of embedded water. Each year we survey the source and level of water our growers use to irrigate their beet crop and currently over 95% of the water contained in our beet is from rainwater alone.

We purchase around 7.5 million tonnes of sugar beet annually, which means our factories receive over 5.5 million tonnes of embedded water in beets. That’s a lot of water to process, so we extract it and put it to work in our factories to maximise efficiency.

Over 60% of our water comes from beet, whilst the remaining sources are rivers (27%), bore holes (6%) and town mains (6%).

Our Environment team has classified water into 7 different types, depending upon its source and properties. This allows our factories to match the suitability of water type to our process requirements. We use water for cleaning, heating, cooling and transportation (sugar beet float in water). To achieve the highest level of efficiency in manufacturing requires a careful balance between water use and energy use; ensuring that the reduction of one element does not require the increase of another.

All of the water we receive is either reused within our manufacturing process, returned to source or evaporated to air as steam. Each factory has its own water treatment facilities, where water is held in a number of ‘lagoons’ before it is treated and returned to source. Water treatment and purification is carried out in accordance with strict Environment Agency standards before release.

British Sugar’s factories operate under ISO 14001, the internationally recognised standard for environmental management. We conduct independent audits to review performance against our continuous improvement targets. As part of this process, we identify and maximise opportunities for the reuse and recycling of water.

Water and wildlife

Our Cantley factory is set in the heart of the Norfolk Broads which as well as being a National Park, is part of the largest protected wetland in Britain. The grazing marshes support a range of important meadow and aquatic plants and hold a large number of European-recognised Natura 2000 sites, some of which are within 10 km of our Cantley factory site.

The factory’s extensive pond systems are home to a large variety of birds and are regularly visited by birdwatchers. Ducks, swans and geese can be seen throughout the year and in summer and autumn wading birds come to feed on the mud flats. Recent rare bird visitors include a Baird’s Sandpiper, a flock of black swans and the Red Necked Phalarope.

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Water quality improvements

We recently reviewed the operation of our effluent treatment systems at Cantley and identified an opportunity to increase the plant’s efficiency and further improve the quality of water returned to the River Yare. After agreement with the Environment Agency and Natural England, capital investment took place to improve the plant’s treatment of additional condensate which has resulted in a reduction of airborne nitrogen emissions from the site.

Immediate benefits to ecological sites

The changes will benefit a number of ecological sites within the Broads area and have provided an immediate benefit in reduced emissions of 6.5 tonnes of ammonia to the atmosphere per year, equivalent to a 14% reduction of the emissions from site.

Reducing volumes of stored pond water at Newark

During our sugar processing campaign, water is recycled on a continuous circuit to move beet into our factories. It carries any soil that is washed from the sugar beet to settle in large onsite ponds and is then returned to the circuit. As the campaign progresses and soil levels increase, the space available for water decreases.

Controlling and reducing the levels of water stored in the ponds is therefore critical to the success of our processing campaign. At Newark we have recently completed a project to identify and improve areas of water segregation. Water leaks were detected and repaired. Where this couldn’t be done during our operational period, temporary solutions were employed to prevent leakage until permanent repairs could be made.

Starting with the largest sources first, engineering solutions were used to efficiently segregate water away from drains and this has succeeded in reducing water volumes going to the ponds by approximately 8%. Key learnings from the project will be shared and rolled out at all of our factories.
4. Energy

When making sugar we use energy to extract sugar from sugar beet, concentrate the sugar solution through evaporation and crystallise it to the required particle size. To minimise energy consumption and maximise efficiency, we employ a number of methods including: plant design, additional co-product lines, smart technology and a team of dedicated Energy Managers who monitor, review and improve our daily energy performance.

Our factories contain state-of-the-art Combined Heat & Power (CHP) plants which can match anything in the oil, chemical and power industries for complexity. Last year in addition to meeting over 94% of our own electricity requirements, our CHP plants generated a further 700,000 MW hours of electricity which we exported to the local electricity network.

A CHP plant uses a boiler house to make steam, which in turn drives a turbine and produces electricity to power a factory. The remaining steam and associated heat is recovered and can be put to use within the factory – we use it for evaporation and again to heat sugar juice at various process stages.

At our Wissington and Bury CHP plants we have also installed advanced gas turbines, the size of jet engines, to increase capacity. They enable us to extract around 80% of the energy contained within fossil fuel during a production campaign, double the amount extracted by a conventional power station. This substantially reduces fuel consumption and associated CO₂ emissions, whilst generating even more electricity for sale.

Reduction targets

British Sugar operates as part of the UK’s Climate Change Agreement scheme and the EU Emissions Trading Scheme to reduce energy consumption and carbon emissions. Our factories manage a year-round programme of continuous improvement and since 1990, we have achieved a 25% reduction in the amount of energy we use to produce a tonne of sugar, whilst simultaneously increasing our range of co-products.

We have adopted a number of rigorous targets and are seeking to realise a 30% reduction in the amount of energy we use to produce a tonne of sugar by 2020 (as measured against the same 1990 baseline). To achieve such a high reduction target requires total commitment from our workforce.

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“Our CHP plants generated over 94% of our electricity requirements...”

...plus a further 700,000 MW hours of electricity which we exported to the local electricity network”
4. Energy continued

Energy Management Team
Our Energy Management Team ensure that multi-million pound investments in new and improved techniques go hand in hand with daily energy conservation initiatives. They identify opportunities to save energy, both large and small. From power-saving drives to lighting management schemes, from compressed air savings to reducing dilution, every project assists our overall objectives. We manage an innovation pipeline where any individual can put forward energy reduction ideas for consideration by our Leadership Team.

Biogas capture
At Bury St Edmunds, we have developed and installed a system to capture biogas from the effluent treatment plant and use it as a supplementary renewable fuel. The project increases energy efficiency, reduces fossil fuel consumption and provides CO₂ emissions savings of around 2,000 tonnes per annum.

Flue gas recirculation
Our Wissington factory has recently completed a project to reduce energy consumption by capturing waste heat from animal feed dryers and reusing it. Flue gas from the dryers is re-circulated to the dryer combustion chamber, achieving a saving of 1,200 tonnes of CO₂ each year. The project was undertaken as a pilot, providing opportunities to share further learnings with all of our factories.

Server virtualisation programme
At our Central Offices in Peterborough, a server virtualisation programme has been completed by our IT department which will handle the company’s growing computer demands, whilst reducing our carbon emission levels. The new system partitions each server computer into multiple “virtual” servers, increasing server efficiency. It has led to a 50% reduction in the level of energy required by our server estate for power and cooling, whilst increasing our operational agility by providing end-to-end visibility of the estate. Applications can now be delivered centrally via a Shared Service Centre and risk will also be reduced by ensuring critical application data is protected across a tiered storage system.

Find out more
Visit our website to learn more about our operations, download one of factory guides or view a short film about our sugar manufacturing process.

www.britishsugar.com
Our Process Efficiencies

We develop and sell a diverse range of sustainable products. From sugar to electricity and tomatoes to animal feed, each product we market responds to customer needs, whilst making a contribution to our efficient use of raw materials. This process map demonstrates the way our Wissington factory operates.

Transforming sugar beet into a wide range of sustainable products...

"Increasing our operational agility enables us to explore and develop new product streams..."
5. Packaging and waste

Our operations team aims to eliminate waste at source or reuse it within our manufacturing process, an approach which reduces cost to our business and the environment.

Where we are unable to reduce or reuse waste, we seek to recycle it. Environment Managers operate a skip system onsite to separate wood, scrap metal, plastics, paper and solvents for recycling. Last year, we recycled around 2,200 tonnes of waste and sent 1,600 tonnes to landfill.

We monitor and report annually on waste levels in accordance with good practice and Environment Agency regulations and since 2003, we have reduced our waste to landfill by over 50%.

In simple terms for every tonne of product we make, we generate less than 2kg of waste and we remain committed to reducing this level further.

Packaging reduction

Although the majority of our 1.1 million tonnes of sugar is delivered in bulk by tanker, British Sugar provides customers with a number of bagged products, using paper from PEFC and/or FSC certified mills.

In Summer 2008 we joined forces with our suppliers to achieve a reduction in packaging weight. The change was driven by our Innovation and Quality team to reduce our direct environmental impact and the indirect impact of the packaging we deliver to our customers, which could end up in landfill.

To achieve maximum results, the team piloted the project with our most popular bagged sugar line – granulated sugar. Our standard 25kg bag of granulated sugar was made of 2 ply of paper. Each ply is characterised by its density and both ply were made with 80g/m² paper.

Reducing the density of any packaging can lead to changes in strength and product protection, so the subsequent trials followed a rigorous ‘gate’ procedure to test the packaging modifications during filling, storage and transport.

Finally, the ‘use’ phase was tested through a customer trial and Weetabix welcomed the opportunity of involvement.

The new bags went into production in January 2009 and have received positive feedback. They will save over 40 tonnes of paper this year for British Sugar and our customers.

As signatories to the WRAP Courtauld Commitment and through our own internal waste reduction strategy, Weetabix Limited are committed to reducing packaging and waste throughout our supply chain. As such we were pleased to support British Sugar in their trials to reduce the weight of the granulated sugar packaging. Initiatives like this help us reduce our waste without adversely impacting on the quality of our raw ingredients.

Don Williams
Supplier Assurance Manager
Weetabix Ltd

“Last year, we recycled around 2,200 tonnes of waste”
Site reclamation

British Sugar invests responsibly in demolition and remediation, to ensure a site is brought to a ‘Good Environmental Condition’ certified by the Rural Payments Agency (RPA). In 2008, British Sugar’s former factory at York was closed as a result of the European Sugar Regime reform with the site demolished and reclaimed for future use.

After consultation with the RPA and the Environment Agency (EA), an action plan was agreed and implemented for the decommissioning, demolition and reclamation of the site. The plan took into account a wide range of health & safety and environmental matters including: health & safety of the workforce and local community, protection of wildlife and ecology, hazardous materials, the demolition process, waste management, control of public nuisances, site security and liaison with agencies and the local Council.

Habitat protection

Careful consideration was given to species conservation and a site specific ecological management plan was followed which ensured that wildlife has been protected and where practicable their habitats were left undisturbed. A disused railway siding was identified as a high quality habitat for aculates and in particular bees. To maintain this habitat, a protective barrier was installed to prevent damage to the bank during demolition and the woodland and scrub on the bank was managed to ensure the habitat for bees was preserved. We sought guidance from local groups concerned with specific species to assist in our work.

Any site demolition generates a large volume of waste material and the British Sugar team, led by an experienced Site Manager and Construction Design Manager, were tasked with demolishing the factory and removing concrete, bricks, scrap metal and large mechanical units. In order to maximise efficiency and minimise waste, the team segregated over 16,000 tonnes of scrap metal onsite, subsequently sending it to a recycling facility. This ensured that transport miles were minimised, reducing potential CO₂ emissions. In addition, over 70% of the rubble generated was recycled locally and used in the building of an extension to the University of York campus. A total of 96% of all materials arising from decommissioning and demolition were recycled.

Redevelopment plans

The process took over a year to complete with the support of British Sugar’s Operations, Health & Safety and Environment teams and their contractors. City of York Council is considering a number of redevelopment plans for the brownfield site and until such time as it is sold, British Sugar will conduct environment and safety risk assessments and security reviews.

Environmental considerations are at the heart of the development of our campus extension. Using materials reclaimed from British Sugar’s York site in the construction of our exciting new facilities has proven to be a highly effective local solution that has benefitted the company, the University and the environment.

Elizabeth Heaps, the University of York’s Pro-Vice-Chancellor for Estates

“96% of all materials arising from decommissioning and demolition were recycled.”
6. Our carbon footprint

In October 2008, British Sugar became the first sugar manufacturer in the world to certify the carbon footprint of granulated sugar using the new PAS 2050 method. Our sugar has a carbon footprint of 0.6g CO₂ per gram of product.

What is a carbon footprint?
A carbon footprint is a measure of the impact human activities have on the environment. It is measured in units of carbon dioxide and other greenhouse gas (GHG) emissions produced. A product’s carbon footprint incorporates its total lifecycle from field to customer.

At British Sugar we believe that carbon footprinting results are most meaningful to both customers and consumers if manufacturers use a common methodology. In 2008 we were delighted to assist the Carbon Trust, as one of their 20 pilot partners, in developing a common standard for calculating the GHG emissions of a product or service.

The PAS 2050 standard was a world first and covers the emissions associated with the entire life cycle of a product from the sourcing of raw materials, through manufacture and use, to disposal or recycling. The carbon footprint label is now displayed on the packaging of many products and to retain it, a company is required to reduce the footprint further.

If we are to meet an 80% reduction in emissions by 2050, innovative businesses have a key role to play. The work that British Sugar has done to pilot the PAS 2050 standard has been invaluable in helping to deliver a UK standard for the measurement of the greenhouse gas emissions from goods and services. We hope this work will enable businesses around the world to look beyond their direct operational emissions and make their supply chains more carbon and cost efficient.

Tom Delay, Chief Executive of the Carbon Trust

The PAS 2050 was developed by BSI British Standards and is sponsored by the Carbon Trust and Defra.

How we measured it
Because the manufacturing process of our products is so closely integrated, their carbon footprints had to be calculated simultaneously. A multi-disciplinary team was established to coordinate the project, which resulted in a detailed assessment of our total supply chain including: sugar, TOPSOIL, stones, LimeX, animal feed, molasses, betaine, raffinate and bioethanol. The project required new internal collaborations between British Sugar experts across many disciplines and took about 9 months to complete.

What did we learn?
The carbon footprint of our granulated sugar reflects a long-term focus on energy efficiency. British Sugar’s CHP plants play a critical role in achieving such low figures across our product range. Further examination of our supply chain reveals that 38% of the emissions associated with our sugar take place at farming stage through tractor diesel, fertilisers and soil emissions. This continues to underline the importance of the work we carry out with beet growers, the NFU and the British Beet Research Organisation (see page 17).

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6. Our carbon footprint continued

Assisting our customers
Many of British Sugar’s products play a significant role in our customers’ supply chains. We are now able to provide them with independently certified data, in support of their own footprinting activities. During 2009 we published the carbon footprints of our LimeX and TOPSOIL and have helped our customers learn more about the PAS 2050 methodology through a series of presentations.

British Sugar also provides independently audited emissions data for our bioethanol. In line with the agreed RTFO rules we annually review the emissions performance of our bioethanol. For 2008/09 our bioethanol resulted in a CO₂ emissions saving of over 70% relative to petrol when measured on a full life-cycle basis. This includes all direct and indirect emissions associated with growing, producing, distributing and using the fuels.

Reducing our carbon footprint
We are proud of the work we have achieved in this area, but carbon footprinting is an ongoing process and British Sugar is committed to seeking further reductions in our carbon impact.

We have targeted a 10% reduction of our PAS 2050 certified carbon footprints by 2020.

“We have targeted a 10% reduction of our PAS 2050 certified carbon footprints by 2020.”

Initial collaboration between PepsiCo and British Sugar has provided us with a valuable comparison into the approaches both companies are taking to drive down carbon emissions in their products. For example, the data British Sugar supplied were applied to our Quaker Oat So Simple Golden Syrup carbon footprint, and they also supported our engagement with a group of key suppliers in our wider supply chain to share their experiences of the footprinting process.

For PepsiCo, working with suppliers who actively reduce the environmental impact of their products is increasingly important, since we know that we must strengthen our supply chains, in response to the challenges of climate change mitigation and adaptation.

Richard Profit
Sustainability & LCA Manager
PepsiCo UK

The sugar carbon footprint (%)
In October 2008, British Sugar became the first sugar manufacturer in the world to certify the carbon footprint of granulated sugar using the new PAS 2050 method.

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<tr>
<td>diesel</td>
<td>11%</td>
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<tr>
<td>beet transport</td>
<td>4%</td>
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<tr>
<td>fuel</td>
<td>57%</td>
</tr>
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<td>transport</td>
<td>1%</td>
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</tbody>
</table>

In October 2008, British Sugar became the first sugar manufacturer in the world to certify the carbon footprint of granulated sugar using the new PAS 2050 method.
The majority of British Sugar’s products begin life as a homegrown sugar beet. We source our beet from local growers in eastern England and it is cultivated within an average 28 mile radius of our factories. Our sugar travels an average distance of 168 miles from beet to bulk delivery at our UK customers.

Although fleet transport only forms a small part (1%) of our sugar’s carbon footprint, we continue to work in partnership with our hauliers to improve fuel efficiency and reduce our external impacts. Delivery Managers monitor daily performance and make improvements through optimising payloads, the fleet, routes, driver-training and backhauling pallets.

**Continuous improvement**

We have recently set a series of targets for continuous improvement and intend to achieve a 20% increase in our UK fleet’s fuel efficiency by 2020 (measured against a 2009 baseline).

“Our beet is cultivated within an average 28 mile radius of our factories....

Longstanding sugar beet grower Tony Lee, whose farm at Ely is under 20 miles from our Wissington factory.

...our sugar travels an average distance of 168 miles from beet to bulk delivery at our UK customers.”
8. Our supply chain

Over 4,000 growers supply 7.5 million tonnes of sugar beet to our factories each year. Sugar beet is a cornerstone crop of arable rotations and is commonly grown in conjunction with wheat, barley or pulses. It provides a valuable break crop, returning organic matter to the soil and preventing the build-up of disease.

In recent years an industry crop assurance standard has been developed, which now forms part of the Assured Combinable Crops and Sugar Beet Scheme. It covers production, food safety and environmental safety criteria and has become a condition of all of our grower contracts. Food produced to this standard is eligible to carry the prestigious Red Tractor logo and can be seen on packets of Silver Spoon granulated sugar (British Sugar UK’s sister retail company).

A close working relationship exists between British Sugar and beet growers. Each factory hosts a team of specialist Agricultural Managers, who meet with growers throughout the year to share the latest technical advice, understand any crop issues and co-ordinate the efficient delivery of the crop.

This ongoing commitment forms part of the UK sugar beet industry’s objective to seek a continuous improvement in crop yield and since 1980, the industry has increased its productivity by 75%. British Sugar, in conjunction with the NFU and the British Beet Research Organisation (BBRO), has developed a crop blueprint, designed to achieve a sustainable increase of average sugar beet yield from 60 tonnes per hectare to 70 tonnes per hectare.

Faster knowledge transfer

British Sugar Online is an internet portal system, designed to provide our growers, hauliers and advisers with instant access to the latest technical information, self-administration and support tools.

Over 75% of our beet growers have internet access and the service has proved popular, offering 24 hour access to growers, who can use the system at a time to suit their own needs. It continues to reduce paper documentation and this year saw the launch of online beet contracting, seed orders, invoices, statements and delivery vehicle registrations. During this year’s contracting period, 500 growers successfully transferred to online contracting (representing 20% of the national sugar beet tonnage) and our aim is to increase uptake to 50% of national tonnage next year.

As a grower and haulier, British Sugar Online gives me instant access to all my contract and delivery information, helping to maximise the efficiency of my business.

UK Beet Sugar Crop Productivity 1980-2008

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John Goodchild, Farm Manager for Bartlow Estate, Cambridgeshire

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Knowledge transfer is an important activity and industry-funded conferences attract more than 1000 beet growers and advisers every year.
Agronomy support tools
The website features a number of agronomy support tools, which are launched through a varied programme of communications, ranging from face-to-face discussions, conferences, open days and exhibitions, publications, text alerts and a designated web portal. We continue to measure the effectiveness of the programme and regularly seek feedback to ensure improvements are actioned.

Recent months have seen developments to a support tool to increase the efficiency of herbicide selection. Growers select the appropriate herbicide based upon crop growth, weed species, weed size, soil condition and weather. In this way, agrochemical inputs are matched directly to climactic and production needs, minimising environmental impacts. The interactive reference tool has been adopted by many as standard.

The Prompt Payment Code
British Sugar plays an active role in the wider business community, working with hundreds of different suppliers and contractors. We are fully committed to fair and consistent payment practices for our supply chain and in June 2009 British Sugar was approved as a signatory of the Prompt Payment Code (PPC). The voluntary code has been developed by government, with the Institute of Credit Management (ICM) and is designed to promote best practice for payment of suppliers.

Participants undertake to:
- pay suppliers on time and in line with the agreed terms
- provide clear and easily accessible guidance on payment procedures
- manage and resolve disputes as quickly as possible

- encourage lead suppliers to adopt the code in their own supply chain

The scheme is independently monitored by the Institute of Credit Management (ICM), the largest professional credit management organisation in Europe.

Further details of the code can be found at: www.promptpaymentcode.org.uk

8. Our supply chain continued
Scientific based knowledge from research and development is essential for the sustainability of any industry and in addition to British Sugar’s internal activities; we support research at both ends of our supply chain.

### The British Beet Research Organisation (BBRO)

The BBRO is a non-profit making company funded jointly by British Sugar and UK beet growers, which commissions and communicates research to increase the competitiveness and profitability of the UK beet industry in a sustainable and environmentally acceptable manner. Assisted by the BBRO, UK beet farmers have reduced their usage of nitrogen fertiliser by more than 40% since 1980. Sugar beet now has the lowest nitrogen usage of any major arable crop in the UK, including cereals, oilseed rape and potatoes. Current projects include determining the performance of new seed varieties, crop physiology and nutrition, control of pests, diseases and weeds, biodiversity, harvesting, storage and soil management.

### The Sugar Bureau

We also support the UK Sugar Bureau which monitors international developments in nutritional science and provides an extensive repository of science-based data for journalists, health professionals and the public.

“Sugar beet now has the lowest nitrogen usage of any major arable crop in the UK”
10. Our people

We believe that our people are the key to our success. British Sugar’s diverse business holds a multi-skilled workforce with specialists in engineering, business, finance and agriculture and we work as one team to succeed.

Built upon the values of respect, being safe, pride, customer focus, one team and a passion to excel, we train people to both know and care about what they do, by setting clear and focused objectives.

Training at all levels

Each year up to 1000 of our workforce will participate in our training courses. This involves all levels from senior managers to new apprentices and our seasonal workers. We encourage our staff to acquire relevant business, technical and professional qualifications and support continuous professional development in appropriate disciplines. We provide this support to promote excellent technical and professional standards; attract and retain high quality employees and maintain and increase technical and specialist knowledge in the business.

Each year we invest in up to 100 individuals, including graduates and apprentices, covering NVQs, MBAs and accredited training courses. We offer financial assistance for further education.

Developing our future managers

Graduate and apprentice recruitment has proved itself to be an essential talent pipeline for our business. It will deliver many of our future managers and technicians, and in contrast to other UK food manufacturers, we have substantially increased our recruitment numbers; since 2004 over 100 graduates and apprentices have joined British Sugar. We recruited a further 38 graduates and apprentices to start work at British Sugar in September 2009.

We also run a year-long placement scheme for engineering students in partnership with Loughborough University. The programme offers a steep learning curve with responsibility from day one and each participant is ‘buddied’ with a mentor to assist their development. Students focus on areas including engineering principles, communication and teamwork and many move forward to our graduate training scheme.

Matt Bark joined the placement scheme in 2007 to experience “the challenge of many real-life engineering problems”. He believes that the scheme played a significant role in changing his approach to learning and achievement, “My attitude to working has changed hugely and I have gone from a ‘middle-of-the-pack’ student to being the top of my year. This turn-around was down to the great year I had working at British Sugar.”

He has since been offered a 10-week research position at Loughborough University and has been accepted onto British Sugar’s graduate training scheme for 2010.

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“Each year we invest in up to 100 individuals...”
Health & Safety of our workforce

As a manufacturing company we pride ourselves on our Safety and Compliance training. We run accredited training courses annually such as NEBOSH, IOSH Managing Safely and IOSH Working Safely. Nothing is more important than health and safety and our target is to eliminate all injuries, by creating a culture which prevents injury and ill-health at work.

Our Safety Co-ordinators manage a year round communication programme to ensure that compliance continues to remain front of mind with employees, contractors and visitors. We organise cross-site safety awards and employees are asked to nominate individuals or teams who have made a significant contribution to our safety systems or culture.

In addition to day-to-day activities, the Health & Safety team take on a number of special projects each year and have recently introduced video-conferencing facilities at all of our UK sites to reduce the amount of time employees spend driving. Since the system was installed it has reduced our drive-time by over 10,000 miles, with the added benefit of reducing potential driving hazards for our employees and associated CO₂ emissions.

One of the highlights for the team in 2009 has been our ongoing inclusion by The Royal Society for the Prevention of Accidents Occupational Health and Safety for their prestigious annual awards; a Silver Award for Bury St Edmunds factory, the President’s award for Cantley factory and an Order of Distinction for both Newark and Wissington factory sites.

DuPont Safety Award 2009

The DuPont Safety Awards were launched in 2002 with the purpose of stimulating individual or collective initiatives for safety enhancement and accident prevention, in the Europe, Middle-East and Africa region. Recipients of these 5 awards are acknowledged “for their commitment to safety and operational discipline as a business necessity as much as a moral obligation”.

In November 2009, we were delighted to learn that our company-wide personal safety initiative – Safety Performance Discussions – had received a DuPont Safety Award 2009 in the Innovative Approach category.

The initiative introduced an ongoing programme of two-way confidential discussions on personal safety matters between line managers and team members. It is conducted through a computer-based program whereby a number of predetermined safety questions, themes and topics are discussed, and action plans are developed. This approach, conceptualized and implemented by British Sugar employees, gives every employee, including seasonal, temporary and contractual staff, the opportunity for personal one-to-one meetings with their line manager. It provides a paperless process for feedback on our standards of behaviour and has contributed to demonstrable reduction in injury rates of over 70% during the last six years at British Sugar.

British Sugar, as a winner of the 2009 DuPont Safety Award for its Safety Performance Discussions initiative, recognizes that a growth-oriented company must not take its focus off safety or SHE matters – a testament that safety is a business value and catalyst for growth.

Koen van Neyghen
President
DuPont Safety Resources,
Europe, Middle East and Africa

2009 Safety Award-Winners at our Cantley and Wissington factories who donated their prize of over £2,000 to the local Air Ambulance fund.
11. Community Activities

British Sugar encourages all of its divisions to play an active role in local communities where sites operate. At British Sugar UK & Ireland, a number of diverse activities take place throughout the year in support of our local communities and stakeholders, some examples of which we have shared here.

Charity fund-raising

British Sugar supports employee fundraising activities directly through our ‘Money Match’ scheme, which offers to match monies raised by an employee for a charitable cause. The process allows our employees to support registered charities which are important to them. We’re proud of ‘Money Match’ and the creative ideas our teams have come up with to raise funds for their favourite charity. Recent activities have included: dragonboat racing, staff raffles, cake competitions, fancy-dress days, cycling, swimming, Christmas e-cards and sky-diving. Over the years funds have been received by the Motor Neurone Disease Association, the British Heart Foundation, Bliss, RSPCA, Friends of Chernobyl’s Children, SportsAid, Macmillan Cancer and many more local and national charities.

Engineering in Education Scheme (EES)

Our Wissington and Bury factories once again took part in this important scheme, designed to encourage young people to pursue a development of skills in science, engineering and technology. As a result of the EES experience, over 89% of the young people go on to read engineering or associated science/IT/technical degrees. Our teams have supported projects at Downham Market College, St. Benedicts School in Bury and County Upper School in Bury (pictured below) in recent years.

“We people in the locality know about British Sugar and what it does for charity events. It’s a real win/win; for the employee, for the charity, for the community and for British Sugar – (that’s four wins!).”

Dave, Area Manager

“We were all nervous about the challenge ahead but once we had completed our first race we couldn’t wait to get back in the dragonboat and give it another go. We are already planning next year.”

Anna, Post-Silo Administrator

Sponsored swim for the charity Friends of Chernobyl’s Children

Participating in an Oxford to Cambridge bike ride in aid of the British Heart Foundation.

Raising money for Cancer Research at their sponsored Race Night at Haydock Racecourse.

The team from County Upper School designed and developed an automated filter cleaner supported by our Bury Factory.

Sponsored 5k Santa Fun Run for the Motor Neurone Disease Association.
11. Community Activities continued

British Sugar on the television

British Sugar receives many requests to film our operations and we assist wherever practical. The past year has included visits from Jimmy Doherty to film our tomato-growing operation for the BBC’s ‘Jimmy Doherty’s Farming Heroes’ and the Great British Menu, where ‘central region’ chef Daniel Clifford interviewed our Bury Factory Manager to learn how our homegrown sugar is made, before using it in his dessert. Most recently, the BBC’s ‘Countryfile’ team visited Norfolk to learn more about how sugar beet is grown, harvested and processed at our Wissington Factory.

Green Energy Farmer of the Year

The Farmers Weekly Awards 2009 took place in October 2009 and they have become a symbol of the innovation and commitment of British farmers. British Sugar was proud to sponsor a new award category, “Green Energy Farmer of the Year”. The event aims to showcase the best farmers in the country and spread best practice, inspire others and influence the public about the important role that farmers play in today’s society.

To find out more visit: www.farmersweeklyawards.co.uk

The Garfield Weston Foundation

The Garfield Weston Foundation was set up by the late W. Garfield Weston in 1958. It is one of the UK’s foremost philanthropic organisations and derives a substantial proportion of its funds from its interests in Associated British Foods plc’s ultimate holding company, Wittington Investments Limited.

British Sugar is a wholly owned subsidiary of Associated British Foods plc.

Further information can be found on: www.garfieldweston.org.uk

LEAF Open Farm Sunday

Many of our beet growers take part in LEAF’s Open Farm Sunday, a day-long event where the general public can visit participating farms and find out ‘what it means to be a farmer and taste the produce’. Every event is different because it is based upon the farm’s own story. We are often invited to participate in the event by our growers and pictured is an event held at Duxford, which received over 1,000 visitors.

To find out details of this year’s event visit: www.farmsunday.org
12. Our standards

“British Sugar has a proven history of being at the forefront of adopting industry-leading standards. We will continue to do so.”

Gino De Jaegher  Managing Director, British Sugar UK & Ireland

Our principles and commitment to the success of our customers requires that we maintain industry-leading quality standards. British Sugar strives to achieve excellence in service, production and distribution.

We operate robust management systems for business and environment, which revolve around the principle of continuous monitoring, review and improvement.

We have a history of the highest food safety standards and all of our factories hold a BRC A grade and ISO 9001. The environmental standard ISO 14001 has been held at all sites since 1999.

Health and Safety considerations are integrated into all aspects of daily operations and in 1999 we implemented the UK food industry’s first Health and Safety management system to BS8800 at our Wissington factory. We went on to become the first company in the world to have our all-sites occupational Health & Safety management system externally certified by Lloyds RQA to OHSAS 18001.

Our priorities are periodically reviewed to achieve the high standards that our customers, employees, stakeholders and neighbours deserve and expect.

Further information

British Sugar UK & Ireland is part of British Sugar Group, wholly owned by international food, ingredients and retail group, Associated British Foods plc. To learn more about our group policies and procedures, please visit:

www.abf.co.uk  www.britishsugargroup.com