



Potatoes are our business...

Our carbon reduction commitment

**Environmental investment for
long-term sustainability**

Our carbon reduction commitment

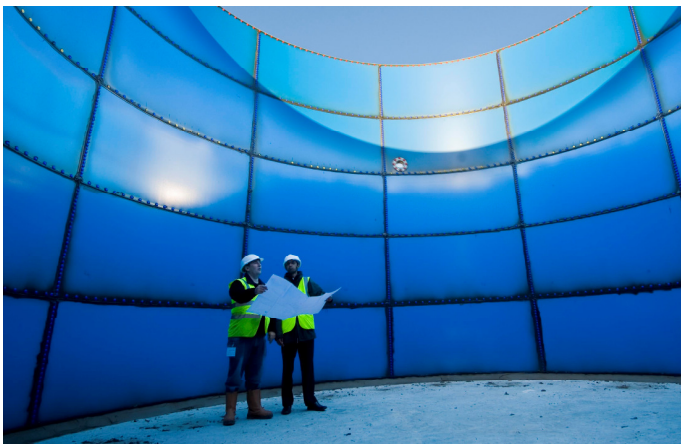
Branston Ltd has grown to become one of the largest buyers and packers of fresh potatoes in the UK. We have three sites, in Lincoln, Scotland and the South West, and over the last few years we've also developed our Prepared foods division, providing innovative prepared vegetable products from our purpose-built high-care factory in Lincoln.

We currently feature 58th in the CRC performance league table, which is testament to the extensive work we've undertaken to reduce energy consumption, and hence carbon emissions, throughout our operations.



Back in 2006 we embarked upon a company-wide carbon footprinting exercise. We identified exactly where fossil fuels were being used and implemented steps to reduce usage wherever possible. Electricity is a major area, so we introduced a range of initiatives to increase efficiency, including monitoring power factor correction and trialling voltage optimisation units.

Substantial progress was made and we were keen to seek external validation of our approach, so in 2008 we invited the Carbon Trust to audit our sites. This resulted in us becoming the first company in the food and agriculture sector to receive the Carbon Trust Standard, in recognition of our work to reduce our carbon intensity despite considerable growth.



Environmental management is intrinsic to our business: from every employee's induction training on the environmental management system to building sustainability into major Cap Ex projects. All our sites are fully ISO 14001 accredited.

In 2010 we invested £2m in environmental initiatives at our Lincoln site to reduce grid electricity and mains water consumption. We built an anaerobic digestion (AD) plant to generate electricity from on-site waste, and we upgraded our water plant so that it can recycle water from both factories at the site.

The AD plant is safe, quiet and odourless and fits perfectly with our *low carbon = low cost* strategy for long-term sustainability. It generates 40% of the site's electricity, utilising outgrade potatoes (previously used for stockfeed) and organic waste from both factories. This is chopped and macerated before being fed into the digester tank, where it is broken down in a similar way to food being digested in a cow's stomach.

The resulting biogas is captured and used to power a combined heat and power (CHP) engine which generates electricity. The remaining digestate is separated in a centrifuge: the liquid is treated by the recycling plant and the solid is taken by a local farmer.



Our integrated recycling system treats AD digestate as well as factory effluent. It has enabled us to reduce mains water consumption by 60% at the Lincoln site. We anticipate further improvement now that we have upgraded the old belt press to a more efficient plate press.



Following the success of the water recycling plant at the Lincoln site, and the saving on mains water, last year we invested around £1m in a similar recycling plant at our South West site. So far it's reduced mains water consumption there by 80%.



Our £4m high-care factory was opened in 2009. In 2010 the building won the Royal Institute of Chartered Surveyors (RICS) East Midlands award in the Sustainability category and went on to receive commendation at the national level.

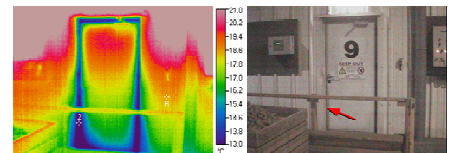
As well as benefiting from the integrated AD and water recycling facilities at the Lincoln site, the design incorporated a range of environmental features to maximise efficiencies and reduce waste.

It has well above average insulation, a heat exchange system that uses warm air from the chillers to pre-heat other areas, a biomass boiler that utilises broken wooden boxes and pallets to heat water and a state-of-the-art building management system that enables resources in all areas to be monitored and controlled remotely.

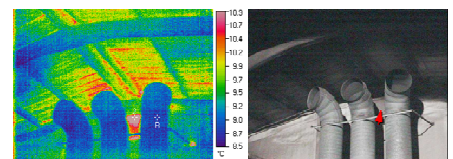
We were so impressed with biomass boiler technology, and the way it not only reduces fossil fuel consumption but also utilises an on-site waste stream, that we installed another one to heat our Lincoln office building. We also implemented other smaller-scale initiatives, including rainwater harvesting for toilet flushing and solar thermal units for water heating.

At our Scotland site we've implemented voltage optimisation technology, which is producing a 5% reduction in electricity use. We're also trialling magnatech fuel conditioning technology, which should help to increase boiler efficiency. And we've been monitoring power factor at all our sites since 2006. It helps us to ensure minimum loss and reduce electricity consumption.

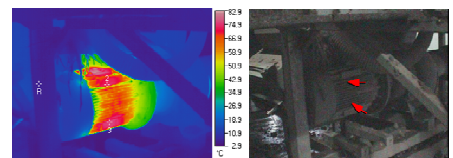
Alongside these initiatives we use thermal imaging surveys as a diagnostic tool, and they're built in to any major Cap Ex building projects that we undertake. They provide non-contact temperature measurement to identify any areas of insulation or ventilation that need attention to avoid wasting energy. They also highlight motors and machinery that's 'running hot', so that any faults can be rectified early.



Ingress of cold air around a door indicating that a new seal was needed.



Inadequate ventilation behind the blower pipes.



One of the motors is running 30°C hotter than it should.



We're delighted that our achievements have been recognised in recent years. In 2010 we received the Tesco Nurture Award for Community & Environment and in 2011 we were awarded the Best Carbon Reduction Technology Award as part of Tesco's Greening the Supply Chain initiative. We continue to investigate new technologies and initiatives to reduce our carbon emissions to ensure that our business is sustainable for the long-term.



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