Hanson








Hanson UK sustainability strategy

Contents

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our business

Hanson is one of the world's largest suppliers of heavy building materials to the construction industry. Our products include crushed rock, sand and gravel, ready-mixed concrete, asphalt and cement related products. We also produce concrete pipes, precast products, concrete pavers, tiles and clay bricks. We employ over 27,000 people, operating primarily in North America, the UK and Australia, with further operations in Asia Pacific and Continental Europe.

Our UK business is split into two operating divisions - Hanson Aggregates and Hanson Building Products - which together operate over 450 manufacturing plants.

Hanson Aggregates produces sand and gravel from the land and sea, crushed rock, asphalt and ready-mixed concrete. We also operate a national contracting business specialising in road surfacing and infrastructure work. We have over 400 production sites and employ some 3,200 people.

Our wholly-owned subsidiary Civil and Marine manufactures ground granulated blast furnace slag (GGBS) – a cement replacement used in ready-mixed and precast concrete.

Hanson Building Products is the largest producer of clay bricks and aircrete blocks in the UK. Our product range also includes wall cladding systems, aggregate blocks, concrete and clay pavers, decorative rocks and stones, bagged products, concrete flooring and precast concrete products. Our wholly-owned subsidiary Irvine-Whitlock is a specialist brick and block laying contractor. We have over 50 production sites and employ some 3,800 people.

Building materials are a key resource for developing a sustainable society. We recognise, however, that there are environmental, social and economic impacts associated with our operations.

Hanson acts in a responsible manner and understands the need to publish its policies and report performance. This UK sustainability strategy is designed to provide our external stakeholders with an insight into the way we run our business, to provide information on our current performance, and on our targets for future improvements.

our policy

We are committed to operating sustainably. To achieve this, we have developed a sustainability policy covering our UK operations. As a minimum, we will:

- comply with all legislation, regulations and codes of practice relevant to our operations
- implement effective management systems that aid the achievement of our objectives.

We also aim to achieve the core goals within the 'cornerstones of sustainability': environmental improvement, employee welfare, thriving communities and economic development.

To achieve environmental improvement we will:

- reduce consumption of fossil fuels and emissions of carbon dioxide per unit of production throughout the extraction, manufacturing and delivery of our products
- protect and enhance biodiversity and geodiversity through site selection, site management and restoration
- increase the recovery and recycling of construction, demolition and other waste products
- develop products that contribute to sustainable development
- reduce adverse impacts on land, air and water, and where possible seek positive benefits and opportunities for the environment.

To ensure employee welfare and development we will:

- minimise the risks of injuries and work-related ill health to employees through effective health and safety management
- ensure all employees are treated equally and with respect
- engage proactively with employees to fully develop their potential.

To promote thriving communities we will:

- liaise with local communities throughout our business activities
- support local communities through provision of employment and other initiatives.

To facilitate sustainable economic development we will:

- continue to be committed to delivering a quality product, efficiently and profitably
- manage our supply chain to ensure it promotes sustainability and ethical procurement.

In support of our policy we will engage with our investors, customers, employees, business partners and other stakeholders in promoting sustainable development.

our products

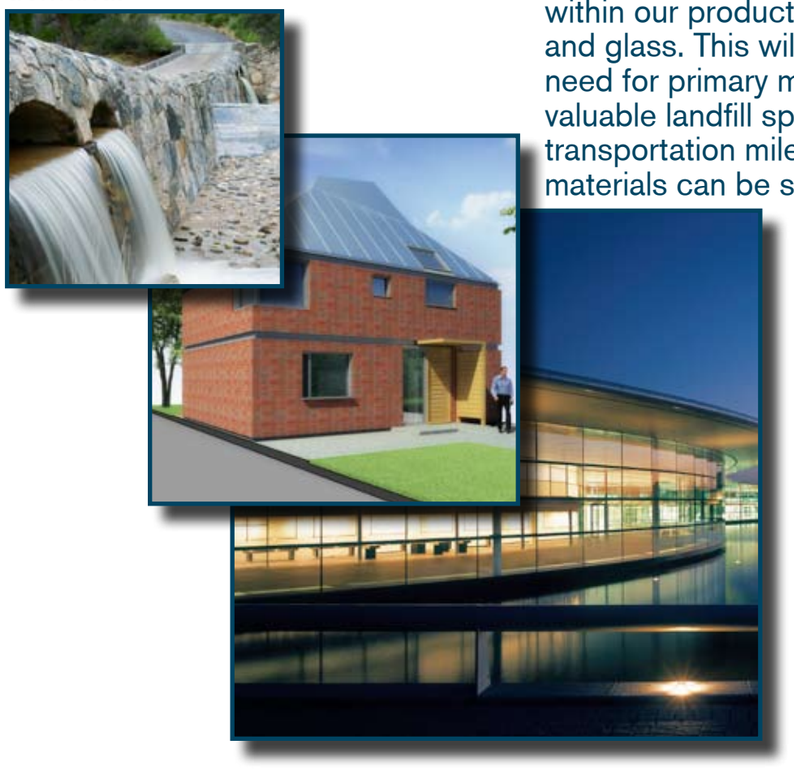
We are committed to delivering quality products efficiently and profitably and we will manage our supply chain to promote sustainability and ethical procurement. Our products are of vital importance in the community, providing the basis for the construction of houses, community and commercial buildings and infrastructure.

We endeavour to make a positive contribution to the environment through developing more sustainable products and though our land and marine management programmes. We are committed to ensuring that we continue to deliver high quality products according to society's demand.

We purchase a large number of products and services and we are assessing our supply chain to ensure that this process has minimum environmental and social impacts. We have central procurement teams in each division and our suppliers will be assessed on factors such as corporate social responsibility and accountability, environment, quality assurance and health and safety.

Product development

We are continuing to develop products which contain recycled materials, are energy efficient and reduce on-site construction impacts. Some of our plants have been recycling materials for around 20 years and we continue to proactively investigate the use of higher percentages and different types of recycled materials within our products, such as ashes, plastic and glass. This will help to reduce the need for primary materials extraction, save valuable landfill space and can also reduce transportation mileage where recycled materials can be sourced locally.



We are also undertaking research into whole system design to ensure our products attain optimal performance when used within buildings, particularly with regard to thermal efficiency and waste reduction.

We constructed a "Hanson house" at the Building Research Establishment's Offsite 2005 exhibition at Watford to demonstrate the use of our products, and a further house was completed for BRE Offsite 2007. This is one of the first houses built to the new Code for Sustainable Housing. It achieved a level 4 standard, well beyond current best practice. As a founding member of the UK Green Building Council launched in February 2007, we will be at the forefront of new research and development to reduce the environmental impact of new buildings.

Founding Member
UK Green Building Council
for a sustainable built environment

We have a range of products with improved environmental credentials. Thermalite is a brand of aerated concrete blocks containing up to 80 per cent recycled material (pulverised fuel ash). It was the first block to receive a Certified Environmental Profile and eco-points score from the Building Research Establishment (BRE), achieving an "A" rating in the Green Guide to specification. Its manufacturing operations are certified to the ISO 14001 and 9001 standards and it offers high thermal insulation. A strict waste minimisation scheme ensures that all surplus materials are either recycled into the next mix, used in other products or as an aggregate bulk fill replacement in road construction.

The manufacture of cement is a highly energy-intensive process, with associated emmissions of CO_2; about five per cent of global emissions are caused by cement manufacture. Ground granulated blast furnace slag (GGBS), a by-product from iron making, is used to replace a substantial proportion of the conventional cement in concrete, thereby reducing the associated carbon emissions by 40 per cent or more. Additional environmental benefits are the reduction in mineral extraction required and the potential reduction in land-filling of slag. The GGBS we manufacture has been eco-profiled by the BRE and assigned an ecopoints score of 0.47 per tonne, which rates it as only a tenth of the environmental impact of Portland cement.

our systems

We operate management systems to help achieve our objectives and to ensure we remain compliant with all relevant legislation, regulations and codes of practice.

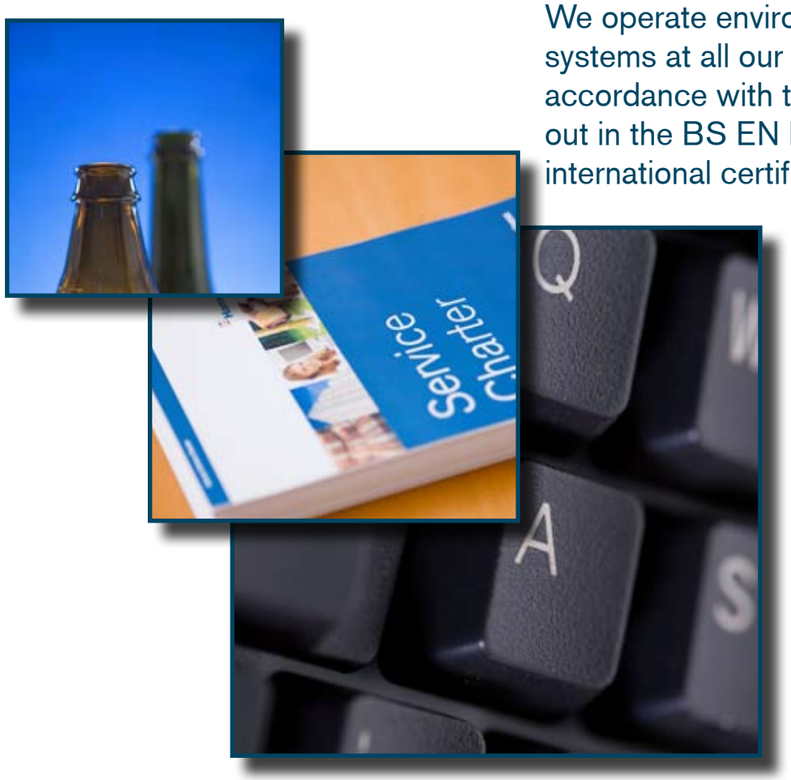
Each division has individuals responsible for environment and health and safety. They report regularly to the Hanson PLC board, which has ultimate responsibility for corporate responsibility issues. Various committees have also been established across the company to deal with specific matters.

On a site basis, the site manager is responsible for all environmental and health and safety issues.

Management systems

We recognise the need for a consistent and co-ordinated approach to managing our impacts and improving performance. We operate robust management systems for dealing with quality assurance, health and safety and environmental issues. Within these systems, responsibility for specific issues is assigned to members of staff. Internal audit processes ensure the systems are working effectively.

We operate environmental management systems at all our production sites in accordance with the methodology set out in the BS EN ISO 14001:2004 international certification scheme. All of our GGBS production sites and all our brick and block works are officially certified to this standard and subject to an external audit process by the British Standards Institution. Our highways and infrastructure work is also certified to the standard. Our quarries are working towards 100 per cent certification.



A large proportion of the company is also certified to the BS EN ISO 9001: 2000, an international standard specifying requirements for a quality management system. This includes all of our brick, asphalt, ready-mixed concrete, paving systems, aircrete block and high PSV (polished stone value) stone production sites. All our aggregates production sites will be certified before the end of 2007.

All our marine dredging activities operate management systems in accordance with the International Management Code for the Safe Operation of Ships and for Pollution Prevention (International Safety Management (ISM) Code). Our Civil and Marine division has implemented the Investors in People standard at its sites.

our environment

We are committed to maximising the environmental benefits of our sites and to the principle of continual improvement during extraction, manufacturing and transportation.

Energy use

We participate in the Carbon Disclosure Project and will continue to decrease our carbon impact through a combined effort to improve energy efficiency and reduce the use of fossil fuels. We monitor energy consumption and have set improvement targets of five per cent for all sites. We have worked with the Carbon Trust on a number of our sites and rolled out the findings across our remaining operations in an effort to reduce energy consumption.

We are also researching into the use of alternatives to fossil fuels wherever feasible. Eighty per cent of the electrical power required for our Clockhouse brick works in Surrey is generated from landfill gas. It is also used to fire the kilns at our Stairfoot and Howley Park brick works. This provides a beneficial use for the waste gases and helps to reduce our dependency on valuable fossil fuels. The use of micro wind turbines is also being trialled at our Kirton brick works.

Three of our sites in the south east have been switched to 'green' electricity supply from RWE npower. Dagenham depot and Bulls Lodge and Birch quarries together consume around 10 gigawatt hours of electricity a year. They now take electricity from renewable sources.

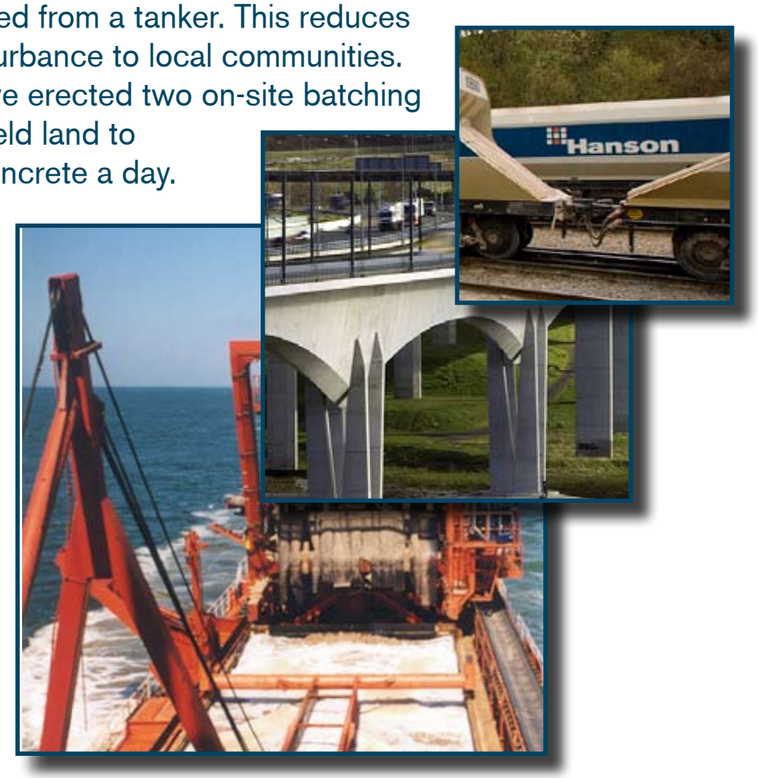
An objective for the next 12 months is to expand our monitoring of energy consumption in individual production processes to allow better understanding of where CO_2 emissions are greatest, and to implement specific action plans to reduce them.

Transport

Our products are transported by rail and water but mainly by road using third party-owned vehicles. Our network of sites enables us to supply materials close to where they are needed, minimising the environmental impacts of transport.

In the aggregates business, where the majority of road haulage is required, some 75 per cent of products are used within 30 miles of our sites.

When supplying concrete for some large construction sites, we construct on-site batching plants or supply portable silos for dry mortar which can be recharged from a tanker. This reduces deliveries and minimises disturbance to local communities. At the Isle of Grain in Kent, we erected two on-site batching plants on an area of brown field land to produce up to 1,000m^3 of concrete a day. This enabled us to supply over 50,000m^3 of concrete for the construction of three large storage tanks for liquefied natural gas (LNG), with significantly reduced transportation impacts.



our environment

Marine-dredged aggregates are delivered to various wharves around the UK, enabling us to transport the materials as close as possible to their final destination. This is particularly evident within the Bristol Channel and Thames estuary, where we have a network of wharves close to areas of high demand.

We investigate the use of other methods of transport wherever feasible. In 2005, we transported over 3.5 million tonnes of aggregates by rail, helping to reduce our transport impact and congestion on the roads. We have five rail-linked quarries and seven depots close to urban centres where demand for our materials is high, and we operate, through a joint venture business, a fleet of four locomotives and 147 wagons. We also deliver some of our materials by inland waterways.

In an effort to reduce our road transport impacts, we are fitting many of our vehicles with GPS systems. This will enable us to monitor their use more effectively and improve efficiencies by using the most appropriate vehicle for each task. Hanson Building Products already uses route allocation software to maximise efficiency. In addition, many of our drivers have already been through training programmes which encourage fuel-efficient driving. This has included participation within the Safe and Fuel Efficient Driving Scheme (SAFED), a scheme that pilot studies have demonstrated results in a fuel saving of almost 10 per cent. As a further commitment to reducing our impacts during delivery, all new vehicles are to be fitted with Euro 5 engines as standard.

our environment

The natural environment is extremely important to us and we seek to enhance biodiversity and geodiversity in all phases of our activities. We have a publicly available biodiversity and geodiversity action plan (BAP and GAP) which covers all our UK activities and provides a structured approach to developing and managing the conservation and geological resources of our land.

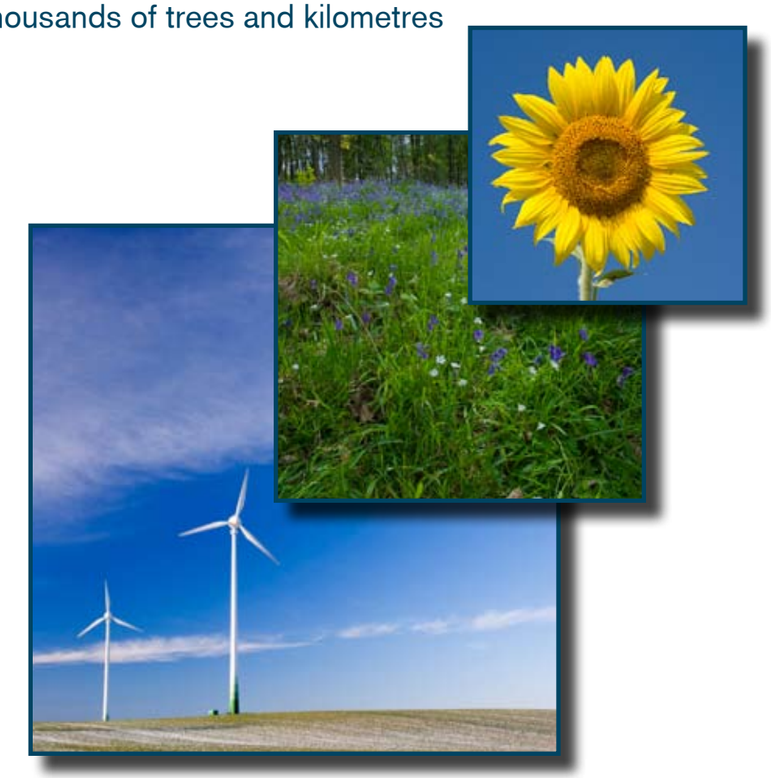
Environmental impact assessments (EIAs) are undertaken for all land and sea-based operations at the planning stage. These include a detailed survey of habitat and species and geological resources directly and indirectly affected by the process. Findings from these assessments are incorporated into site-specific action plans; 20 of our sand and gravel quarries currently have a BAP and 15 have a GAP. We have also developed excellent relationships with conservation bodies, including memoranda of understanding with both Natural England and the Countryside Council for Wales. Forty-two of our sites include sites of special scientific interest (SSSIs), many as a direct consequence of our work. Understanding the environmental processes in these areas of national importance is key to ensuring their continued protection.

The marine environment is extremely sensitive and we are committed to minimising and mitigating any environmental impacts of our activities. We manage our dredging activities very effectively and in recent years have returned a significant area of licensed undredged sea bed to the Crown Estate.

By using a smaller area of the seabed more intensively, we reduce the impact we have on the surrounding environment.

We also undertake monitoring of the surrounding area before, during and after our operations to ensure our impacts are kept to an absolute minimum. One current post-monitoring scheme has been undertaken for over five years in partnership with other dredging companies and is the largest monitoring programme ever undertaken in the eastern English Channel.

The restoration of our land-based mineral workings offers an opportunity to make a positive contribution to society and the environment by improving the amenity of land for local residents and increasing wildlife diversity. We have successfully restored a large number of sites to a sustainable after use in accordance with local authority guidance, often working with bodies such as the Royal Society for the Protection of Birds (RSPB) and Natural England. We plant tens of thousands of trees and kilometres of hedgerows per year.



our heritage

Archaeological artefacts are often encountered during mineral extraction and have positive impacts through extending our knowledge of the past. We work in accordance with the CBI protocol on archaeology and commission archaeological experts to undertake a survey before quarrying begins. A watching brief is often adopted during extraction.

Several key finds have been made in the last few years which have contributed to international knowledge. One of the most northerly examples of a mammoth tusk was found within marine-dredged aggregates in February 2006, contributing to knowledge of the limits of the ice front during the last ice age. Ongoing work has also been undertaken for the last 18 years at Cassington quarry near Oxford, where finds have included the remains of a bronze age circular house, segments of decorated pottery and flint and the remains of a man from 4,000 years ago.

Extensions to our clay quarry at Bradley Fen near Peterborough revealed dug out canoes, kilns, houses and bronze age skeletons. A collection of bronze age swords and spears was of particular significance, because archaeologists were able to relate the objects to the adjacent bronze age fields and houses.

At the adjacent Must Farm extension, exploratory investigations have revealed extraordinary remains of international importance, including metalwork, glass beads and whole pottery vessels. Most significant are the textiles of late bronze age which have been preserved due to the waterlogged conditions. Given the fragile nature of the remains, we have sealed the site with clay bunds and undertake regular water and oxygen monitoring to ensure their ongoing preservation.

As recognition of the importance of the archaeology found at the site, we have also agreed to make an annual financial contribution to display some of the finds at a local archaeological study centre. We have also helped to protect and preserve artefacts found at other sites through financial support.

water and waste

We use abstracted ground and surface water and mains water for our process activities. The water is recycled within the process wherever possible and a high percentage is often returned to the natural system.

Through the introduction of water-saving measures, we achieved an average consumption reduction of 6 per cent at our concrete batching sites in the midlands between 2005 and 2006. We will continue to improve water efficiency wherever possible and are in the process of improving our water data collection to assist with the process.

We currently recycle water at many of our sites and are keen to increase this with further investment in appropriate equipment and facilities. Although our levels of controlled waste going to landfill are relatively minor in comparison to the volume of materials we produce, we aim to minimise the amount generated. Within our building products division, we decreased our waste disposal rate by 25 per cent in 2006, and we are aiming to reduce this even further.

During our extraction and processing we aim to use as much material as possible in the production process. Where surplus overburden or quarry production waste is generated, it is generally back-filled as part of landscaping and restoration activities.

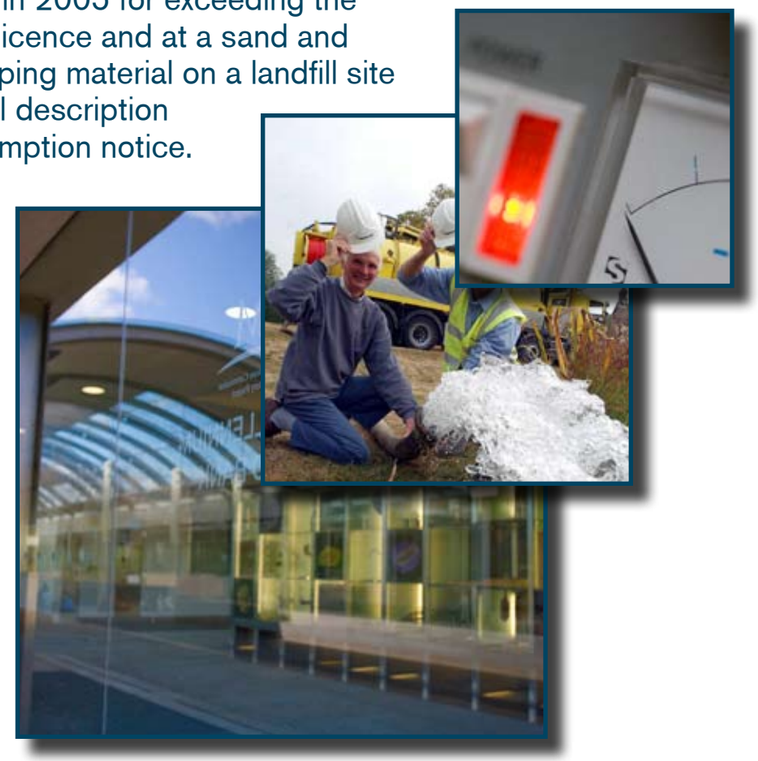
In addition, a number of projects are under way aimed at increasing our use of recycled materials, including crushed concrete, construction and demolition waste, spent rail ballast and asphalt planings. These materials replace primary aggregates in added-value products such as ready-mixed concrete, asphalt and concrete blocks. A key example is in the production of GGBS, a by-product from the manufacture of iron. This is used in a third of all our ready-mixed concrete and can replace up to 50 per cent of the normal Portland cement content. Up to 80 per cent of the material used in our Thermalite blocks is pulverised fuel ash (PFA), a by-product from coal burning power stations. The incorporation of these materials in our products prevents them being sent to landfill.

Reducing emissions

Our activities are highly regulated by the Environment Agency and local authorities and we operate under various permits and consents. We operate monitoring systems that ensure that our emissions remain below permitted levels.

Compliance

Very few regulatory non-compliances occur, but we were prosecuted at a Premix plant in 2005 for exceeding the limits on a water abstraction licence and at a sand and gravel quarry in 2006 for keeping material on a landfill site which fell outside the material description permitted on the relevant exemption notice. Both issues have been resolved by strengthening procedures on sites in terms of maintaining accurate abstraction records and ensuring that all materials being imported for restoration purposes are carefully inspected before being tipped. Environmental damage in both instances was minimal.



our employees

We are committed to minimising the risk of accidents and work-related ill-health, ensuring employees are treated equally and with respect, and fully developing their potential.

We operate comprehensive health and safety management systems across all our sites. The aim is for no injuries to occur, and we have signed up to various industry initiatives, including the Health and Safety Executive, Quarry Products Association (QPA) and British Precast Concrete Federation (BPCF) “Hard Target” schemes and the British Ceramics Industry pledge. All are aimed at reducing accidents. Within Hanson Building Products our 2010 targets were met by 2005 and our concrete manufacturing sites have won the highest star award for reducing accidents from the BPCF every year since 2000, together with a special award for our exemplary performance over a five year period. In the aggregates division, we received four certificates of merit for health and safety best practice at the QPA 2006 awards.

We are actively promoting a wide range of education and training, best practice dissemination and behavioural auditing initiatives to pursue our ultimate goal of no lost-time incidents. Our induction training includes a significant section on health and safety performance and safety initiatives. We also have health and safety working groups and hold awareness days.

We operate a health and safety system based on continuous improvement and a target of zero injuries. Near-misses are recorded and reported. This information is collated by health and safety advisers for analysis. Alerts are circulated around the business giving details of both accidents and near-misses, with advice on measures that can be taken to avoid similar circumstances. Although our health and safety data has shown significant improvements over the last few years, we remain committed to our ultimate goal of zero injuries.

Training

To ensure our staff maximise their potential, we provide a substantial amount of training. All new staff, including contractors, undergo a detailed on-line induction programme in addition to our site-based induction procedures.

Hanson was one of the first of more than 150 leading employers from across England to make the government-backed ‘skills pledge’ to train staff. The pledge asks businesses to make a public and voluntary commitment to support employees to develop basic skills, including numeracy and literacy, and work towards relevant, valuable qualifications to at least level two (the equivalent of five GCSEs at A - C grade).

As part of our performance management process every member of staff has an annual performance review. At this meeting, personal development plans are reviewed which identify requirements to support their job role or career development. Employees are encouraged to achieve National Vocational Qualifications (NVQ) or Scottish Vocational Qualifications (SVQ). Our management staff work towards the Hanson management certificate and diploma in management (endorsed by the Institute of Leadership and Management) and there is also a leadership training programme for senior management.

our communities

Despite our overall size and international presence, we operate, in effect, as a series of independent local businesses, providing jobs in mainly rural areas and playing a part in community affairs. Local managers are encouraged to build and maintain close links with neighbours and ensure the business remains both an accepted and acceptable part of the local community. Visits to Hanson sites, particularly from schools, are welcomed. Visiting groups include local residents, planning officers, environmentalists, professional associations and students. Within our aggregates division, through our open day programme we had more than 7,300 visitors to our quarries in 2005 and more than 400 educational visits.

Our educational resource pack, Material World, provides a series of study topics linked to the National Curriculum and designed to introduce primary age children to the process of quarrying and brick making, the materials used, the environmental considerations taken into account, and the end products made.

We provide volunteers at local schools to deliver programmes which help young people gain experience of how business works and understand the role it plays in providing employment and creating prosperity.

We also help charities and voluntary groups in the areas around our sites and offices by providing monetary or materials donations.

our stakeholders

We are committed to engaging with our investors, customers, business partners and other stakeholders in promoting sustainable development.

Our stakeholders include our staff, customers and consumers, lenders and insurers, investors and analysts, government, regulators, local communities, NGOs and industry bodies, the media and suppliers.

We recognise the importance of a high level of communication with our employees and undertake this through a variety of methods. On a worldwide level, there is a quarterly magazine and on a divisional basis, there are more frequent newsletters and employee forums. A sustainability committee has been meeting in Hanson Building Products since 2006, and a sustainability committee covering UK-wide operations is planned. A wide range of information is also made accessible to staff via the company intranet site.

An employee survey has recently been completed in both divisions. Our commitment to health and safety achieved a very positive response and our employees were generally positive about being kept informed by their managers, having performance reviews and being treated fairly and with respect. Employees have a clear understanding of their role and feel that they have the right materials and equipment to do their jobs. Some areas have been highlighted for improvement and we will be working to develop our performance.

Communication with our customers occurs at all stages, including the initial marketing and advertising of our products, during tender submission, throughout the supply process and in response to specific requests for information. We have product services teams that provide an interface between the customer and can provide technical advice on the use of our products. Hanson Building Products also provides training to colleges on how to promote sustainable building by using our products most effectively.

our stakeholders

Community liaison is a key part of the operation of sites, and many of our operational sites have local liaison committees comprising councillors, residents and regulatory officers. They meet regularly to discuss issues of concern and to talk about site operations, providing a vital link between local management and the local community. They also provide a crucial interface between site management and other stakeholder groups, such as the Environment Agency and environmental NGOs.

Within our aggregates division, the number of liaison groups has been increasing over the past few years and in 2005, there were 66 in operation.

The local liaison committee at Chipping Sodbury quarry in South Gloucestershire has been a prime point of contact for discussion and debate regarding proposals to update the quarry's operating conditions. The liaison group at Earls Barton quarry in Northamptonshire provided a vital link between local residents and the company when plans for an extension to the quarry were tabled and later submitted.

Our web site is a prime source of information about company performance and we are currently scoping a revised corporate social responsibility section covering many of the issues outlined in this document. This will include up-to-date reporting of sustainability performance.

moving forward

To monitor progress with our sustainability strategy we have identified 10 clear goals linked to our business, around which we can measure our performance. Each of our goals is linked to a key performance indicator and a target for moving forward.

The table opposite lists our goals and targets. These are linked to management, environment, recycling, employees, communities and the supply chain.

	Business focus	Our goals	Our key performance indicators	
1	Management	Maintain the internally audited environmental management systems in place at all sites and increase the number that are externally certified to BS ISO 14001	Number of sites which operate a certified environmental management system.	Extend ISO14001 certified status to all our brick, block and precast sites by the end of 2007
2	Environment - energy	Reduce consumption of fossil fuels and emissions of CO2 due to the extraction and manufacturing of our products	Kilos of CO2 produced per tonne of: Aggregates Concrete and mortar Asphalt GGBS Bricks Aggregate blocks Thermalite blocks	Reduce CO2 emissions per tonne of product by five per cent by end 2008 based on 2006
3	Environment - transport	Reduce emissions of carbon dioxide due to the delivery of our products.	Out of gate movements per tonne sold.	Reduce the number of vehicle movements per tonne sold. .
4	Environment - water	Reduce consumption of water	Cubic metres of mains water used per tonne of product sold.	Reduce mains water used per tonne product sold
5	Environment - biodiversity	Protect and enhance biodiversity through site selection, site management and restoration	Number of active quarries / clay pits with biodiversity action plans	Extend the number of individual site BAPs year on year in rolling programme
6	Recycled products	Continue to develop products using secondary and recycled materials.	Percent of product sold (by weight) which is recycled, secondary or by- product	Increase use of recycled, secondary and by-product materials per tonne sold.
7	Employees	Continue to reduce the number of accidents and lost working time	Lost time injuries rate	Reduce LTIs by 20 per cent year-on-year towards an overall target of zero
8	Employees	Maintain a competent workforce.	Number of employees that have completed a first full level 2 qualification	Develop a programme to monitor and increase number of qualified employees to level 2, working towards a target of all staff
9	Communities	Maintain positive relations with local communities	Number of visitors attending open days or educational / informative visits	We will continue to operate an open door policy at all our sites and support and record community-based site visits.
10	Supply	Ensure materials included in our products from third party sources are produced in a sustainable manner	Percentage of suppliers providing sustainability data	Data to be available from all major suppliers of materials used in our products

glossary

BAP Biodiversity action plan

BRE Building Research Establishment

Carbon Trust Government-funded, independent company that helps business to cut carbon emissions

EIA Environmental impact assessment

Euro 5 Low emission HGV diesel engines

GAP Geodiversity action plan

GGBS Ground granulated blast furnace slag, a by-product of the steel industry

GPS Global positioning system – tracks the position of delivery vehicles

Green Guide The BRE's environmental assessment for building elements

ISO 14001 The international standard for certification for environmental management systems

ISO 9001 The international standard for certification for quality management systems

NGO Non-governmental organisation

PFA Pulverised fuel ash taken from coal-fired power stations

QPA Quarry Products Association, trade association representing the major UK quarrying companies

SAFED Safe and Fuel Efficient Driving programme - set up by industry to improve driving techniques and fuel efficiency

Skills pledge Government-funded skills and training initiative

SSSI Site of special scientific interest

UKGBC UK Green Building Council - an organisation set up by industry to promote sustainable construction

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