



**Our performance  
and sustainability  
summary report 2015**

This summary report, which we are producing for the first time this year, covers the calendar year 2014 and includes data from our building products division, which was sold in early 2015.

You can find a full version of the report on our website at [hanson-sustainability.co.uk](http://hanson-sustainability.co.uk)



## Our business

Hanson UK is one of the largest suppliers of heavy building materials to the construction industry. We produce aggregates (crushed rock, sand and gravel), ready-mixed concrete, asphalt, cement and related materials.

We are managed in four business lines – Hanson Aggregates, Hanson Asphalt and Contracting, Hanson Concrete and Hanson Cement. We also own Midland Quarry Products and the walling contractor Irvine Whitlock. We are part of the HeidelbergCement Group, which has leading global positions in aggregates, cement, concrete and heavy building products.

Turnover for the UK business in 2014 was £1,269 million. Capital investment for the year totalled £22 million. Our principal markets are in England and Wales and the central belt of Scotland. We have no production operations in Northern Ireland.

In March 2015 HeidelbergCement sold its building products businesses in North America and the UK to the US private equity investor Lone Star Funds. As a result, Hanson UK now operates 308 manufacturing sites and employs 3,480 people.

## 2014 awards

- **Royal Borough of Greenwich**  
Civic award for hosting the Royal Greenwich Tall Ships event at Victoria Deep wharf.
- **Solar Power Portal UK**  
Best ground mount solar site under 10 megawatts for the plant at Ketton cement works.
- **Mineral Products Association health and safety awards**  
TUC Trophy for worker involvement won by Hanson Contracting's iPave tablet system.
- **Highways Agency Supplier Recognition Scheme**  
Highly commended award for Hanson Contracting's iPave tablet system.
- **The Concrete Society**  
Customer service awards for supply to One St Peter's Square, Manchester, and emergency repairs to the sea wall at Dawlish in Devon.
- **British Marine Aggregates Association**  
Ship with the best attitude award for marine archaeology for the crews of the Arco Arun.
- **Tip-Ex and Tank-Ex**  
Tanker safety award for Hanson Cement.

## 2014 highlights

- ✓ **Reduction in lost time injuries**
- ✓ **Fall in mains water use per tonne of product**
- ✓ **Increase in rail transport**
- ✓ **Increase in local liaison activity**
- ✓ **Over 90 per cent of quarries with biodiversity action plans**



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## Foreword by Patrick O'Shea, chief executive officer, Hanson UK



2014 was the best year for our business since the start of the financial crisis in 2008 as construction activity continued to increase and demand for our products rose. We expected an improvement in our markets, but the outcome was exceptional and confirmed that the dark days of the recession are now firmly behind us.

The Construction Products Association is forecasting a further 5.3 per cent rise in overall output in 2015. Private sector housing and infrastructure will again lead the way but commercial activity – offices, shops and business parks – is also set to increase. A key upside for our business, with its wide geographic spread, is that the recovery is broadening out from London and south east England to other regions.

A rising market inevitably means a rising workload, but we have met the challenge head on and delivered a high level of quality and service to our customers, although the rapid upturn has meant that in some areas our sustainability indicators have not shown the improvement we were targeting.

We have continued to invest in our people through training and development, and in projects to improve efficiency and save energy. New systems have been introduced to make better use of our trucks and we have invested in new and improved production plant to help achieve our challenging carbon reduction targets. Most importantly, we have kept health and safety at the very top of our sustainability agenda.

It's clear from this report that we still have a lot of hard work to do if we are to achieve all our 2020 sustainability targets, but I am confident that with a continuing favourable trading environment we can – and will – succeed.

“Most importantly, we have kept health and safety at the very top of our sustainability agenda.”

## Our sustainability strategy and targets by Paul Lacey, head of sustainability, Hanson UK



We have recently completed a detailed review of our sustainability strategy and targets to ensure they meet the requirements of our business, stakeholders and our parent company HeidelbergCement's sustainability ambitions to 2020 and beyond.

The work we did reinforced our belief that the sustainability strategy we launched in 2010 remains fit for purpose and our targets continue to meet the needs of the business and our stakeholders. We also concluded that our site sustainability representatives have a key part to play in delivering those targets.

However, some areas for improvement have been identified and we plan to expand our reporting on communities, energy and product quality, refine some of our targets and add an additional theme – enabling sustainable construction. This is about helping our customers to deliver sustainable construction. It builds on ongoing discussions with our stakeholder working group on collaborative working and development of product and service solutions.

As a result, the six themes which will underpin our sustainability strategy from 2015 are:

- **People and communities**  
– creating sustainable communities and working with our stakeholders
- **Carbon and energy**  
– climate change and energy
- **Waste and raw materials**  
– sustainable consumption and production
- **Water and biodiversity**  
– natural resource protection and enhancing the environment
- **Quality processes and systems**  
– management systems for continual improvement
- **Enabling sustainable construction**  
– partnership, service and product development.

“Our site sustainability representatives have a key part to play.”

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**Our 2020 targets:**

Zero harm; five community events a year at every quarry; meet the targets set in the Mineral Products Association's 'Safer by Competence' programme by 2017; reduce valid neighbour complaints year on year.



Open day visitors at Ribblesdale cement works in Clitheroe.

**Lost time injuries**

fall year-on-year



Down by

**51%**  
since 2010

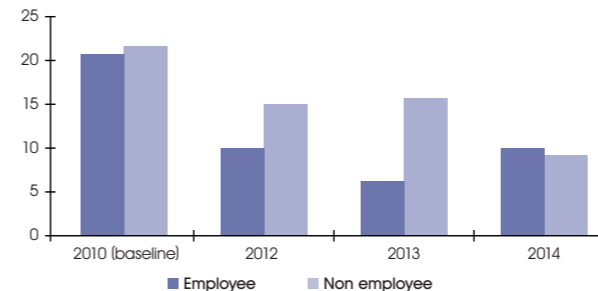
**Health and safety**

The total number of lost time injuries (LTIs) fell from 32 to 31, but employee LTIs rose from 14 to 20. The LTI severity rate for our own employees, derived from the total number of days lost, fell from 62.4 to 49.3 – beating our previous lowest of 58.6 achieved in 2012. Training was provided for 105 site sustainability reps.

**Stakeholder performance**

We continued our programme of stakeholder engagement workshops involving customers, suppliers, trade associations, community leaders and NGOs. Valuable feedback has helped shape our sustainability approach.

**Number of lost time injuries**



**Environmental incidents and emissions**

We use our Entropy software to record incidents, near hits and complaints and improve reporting. It allows us to analyse complaints and introduce appropriate mitigation measures. Reports are generated monthly and systems are in place for recording and tracking required actions.

**Employment and skills**

Spending per head on training and skills rose during the year, with the focus on safety, health, environment and leadership. We continue to provide a range of benefits to support employees including a counselling service and a confidential helpline.

**Local community**

Visitor numbers to our sites were similar to 2013 and boosted by two very successful open days at Ribblesdale and Padeswood cement plants. Nearly two thirds of our quarries held three or more community events in 2014.

We help charities and voluntary groups in communities close to our sites and offices through the Hanson in the Community scheme. Our employee charity matching scheme contributed £21,000 to 70 charities during 2014.

**65%** of quarries held three  
**Community Events**  
in 2014

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# Carbon

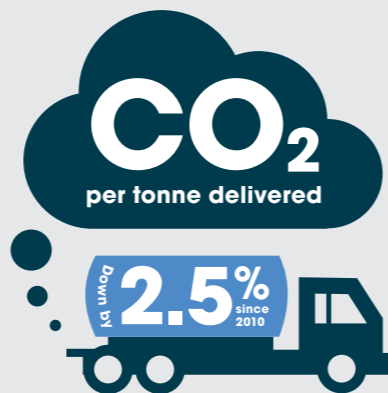


## Our 2020 targets:

Reduce carbon emissions by 10 per cent and energy emissions by five per cent per tonne of product based on 2010 baseline; 35 per cent use of biofuel in cement by 2020; reduce transport emissions by five per cent per tonne based on 2010 baseline.



Solid recovered fuel (SRF) is made from domestic waste and biomass.



## Energy efficiency

Overall energy use rose during the year, reflecting higher production levels. Energy use per tonne was also up; this was partly due to increased use of recycled asphalt planings (RAP) in our asphalt plants and a move in our concrete business to supply materials which are mixed at the plant rather than in the truck. The increase in demand for materials has also required the reopening of facilities which are still not operating at peak capacity leading to inefficiencies. In the second half of the year we decided to seek the ISO 50001 energy management standard to help drive energy improvements into the business.

## Waste as fuel

We continue to invest in new facilities at our three cement works to enable greater use of alternative fuels. These include profuel – a solid kiln fuel manufactured from paper, plastic and fibrous wastes that are either uneconomic or impossible to recycle – and solid recovered fuel (SRF), which is made from domestic waste and biomass. Overall use of waste as a fuel in our cement kilns continues to rise and now stands at 61 per cent; the use of biomass also rose during the year from 13 to 16 per cent.

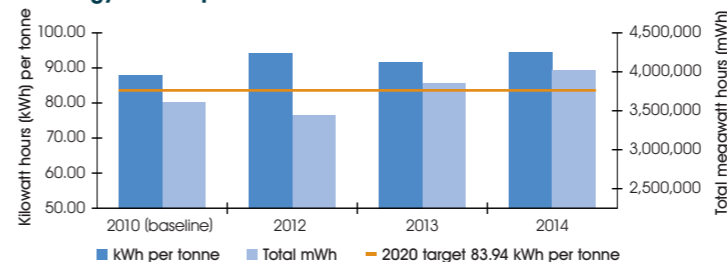
## CO<sub>2</sub> emissions from production

There was an 11 per cent rise in kilograms of CO<sub>2</sub> per tonne of production due to a different mix of energy generation and a change in the carbon conversion factor applied to energy use, principally electricity. Our renewable energy programme is continuing and we are looking particularly at sites with potential for solar generation.

## CO<sub>2</sub> emissions from transport

CO<sub>2</sub> emissions from transport on a per tonne basis fell slightly during the year, partly as a result of a similar reduction in distance carried per tonne. This is an impact of reopening mothballed sites. Rail deliveries increased from 9.2 to 10.7 per cent, largely due to increased aggregate deliveries.

## Energy consumption



## Waste and materials



### Our 2020 targets:

Reduce non-process waste to landfill by 85 per cent; increase use of recycled materials in products.



The Lee tunnel, part of the new London super sewer, incorporated Regen in the concrete mix.



### Waste minimisation

We reduced waste to landfill by a further 29 per cent during the year, with the biggest fall coming in asphalt where we recycled a lot more filler dust into the product. Some filler dust was stockpiled, but the general trend remained positive. We have now achieved a 62 per cent reduction in waste to landfill since 2010.

### Materials efficiency and recycling

**REGEN** The cement replacement Regen (ground granulated blast furnace slag) reduces embodied CO<sub>2</sub> in concrete and provides a number of other benefits. Its use in ready-mixed concrete means we have one of the highest cement replacement rates in the UK market at 37 per cent. We are working towards our target of 45 per cent by 2020 by developing mixes with higher Regen content, as well as stressing the CO<sub>2</sub> benefits of these products to customers. Over half of our asphalt plants can use recycled asphalt plantings (RAP) in base course mixes at rates of up to 25 per cent. The national average is around nine per cent (including the use of filler dust, a by-product). Our target for 2020 is 10 per cent, excluding filler dust and in 2014 we improved from 4.54 to 5.63 per cent.


### Product quality and performance

Product quality and customer service are critical to our business and we are devoting an increasing amount of resources to these areas to improve performance.

Our aim is to grow a loyal customer base, generate repeat business, and eliminate complaints by delivering the highest levels of product quality and service, including our Right first time campaign.

### Waste to landfill



**37%**  of cement used in our concrete mixes is a low carbon substitute

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## Water and biodiversity



### Our 2020 targets:

Reduce mains water consumption by 25 per cent per tonne of product. All quarries to implement published biodiversity action plans.



The largest man-made reed bed in Europe is being created at Needingworth quarry in Cambridgeshire.

**Mains water**  
Down by  
**17.5%** per tonne since 2010

### Water

Mains water use increased slightly during the year, reflecting higher production volumes, but we achieved a three per cent reduction in litres per tonne. This has been driven by a greater awareness of the need to conserve mains water use.

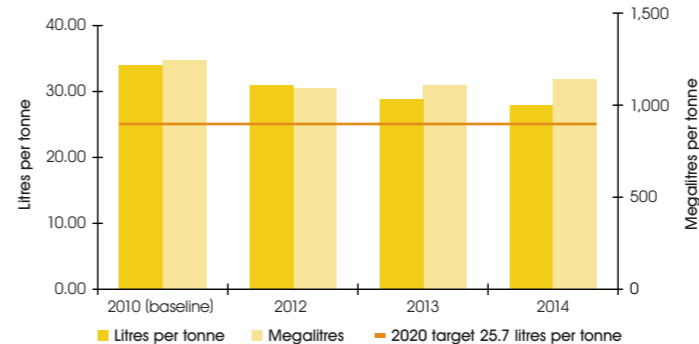
### Biodiversity and site stewardship

We now have biodiversity action plans (BAPs) in place at over 90 per cent of quarries that have been active in the last three years and they are all published on our website. In 2010 we introduced a new indicator looking at quarries with high biodiversity

value. These are defined as those located within 500 metres of a Site of Special Scientific Interest (SSSI). All of these sites now have BAPs in place. During the year we became patrons of the Freshwater Habitats Trust (formerly Pond Conservation).

A project by a team from Anglia Ruskin University, which looked at insect biodiversity in grasslands at Needingworth quarry in Cambridgeshire, won the UK section of the Quarry Life Award 2014. Bath Spa University won the international biodiversity enhancement category for a project at Whatley quarry in Somerset on enhancing ground flora in woodland plantations.

### Mains water use



**91%** of quarries have biodiversity action plans

**Anglia Ruskin and Bath Spa Universities** won top



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## Systems



### Our 2020 targets:

Maintain and improve performance in all areas.



A tablet system developed by Hanson Contracting allows real-time reporting from construction sites.



## Maintained Achilles



five-star  
certification

### Improving standards

We continue to develop our integrated management system (IMS), which encompasses safety, health, environment and quality and provides a consistent set of procedures which are regularly reviewed and updated. We continue to review the IMS to identify ways in which it can be made more effective.

All our production sites are certified to OHSAS 18001 Occupational health and safety standard, ISO 14001 Environmental standard, ISO 9001 Quality standard and BES 6001 Responsible sourcing of materials. All our business lines operate comprehensive quality management systems to ensure products are made to the highest standards.

Hanson was the first national surfacing contractor to achieve the BS 11000 standard for Collaborative Business Relationships. This prestigious international award acknowledges organisation's initiatives to create sustainable relationships, company competitiveness and enhanced performance.

It also recognises the importance of getting the best out of business relationships by sharing resources and opportunities.

We continue to invest in new technology and to embed energy awareness. In the second half of the year we decided to seek the ISO 50001 energy management standard as a means of complying with forthcoming ESOS (Energy Saving Opportunity Scheme) legislation and to help drive energy improvements into the business. Work is under way on this programme.

We maintained our five-star rating with Achilles, the online accreditation standard.



## ISO 50001 certification



commitment to achieve  
ESOS compliance

Certification maintained for

ISO 9001 ✓ OHSAS 18001 ✓

ISO 14001 ✓ BES 6001 ✓



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## Sustainability in practice



### Safety week expands

Our annual health and safety awareness event was expanded from one week to three to reach more people face-to-face across the business. The event ran from mid-September and featured site-based training for responsible managers at 18 locations delivered by the sustainability department. The half-day sessions covered the launch of LOTOTO (lock out, tag out and try out), guarding training, voluntary personal health checks from health surveillance provider IDC, and presentations by our PPE and workwear supplier.



### Phase two of industry-leading apprentice scheme launched

The latest group of recruits to join the Hanson Leadership, Education and Development (LEAD) higher apprentice programme started work in September 2014. The industry-leading programme, which was launched in 2012, is designed to train and educate school leavers with a minimum of two A levels who are keen to learn and develop supervisory and management skills in a hands-on working environment.



### Open days attract 1,400

More than 1,400 people attended open days at Ribblesdale and Padeswood cement plants. Clitheroe town crier Roland Hailwood opened the Ribblesdale event, where the top attractions were the newly repainted Clitheroe Castle shunting locomotive and a new CAT loading shovel. Guides took visitors around the works in a fleet of minibuses and explained how cement is made.



### Tablet system wins top industry award

A ground breaking system which uses Samsung Galaxy tablets to record and transmit information from near-hits and potential hazards to quality control checks has won a top industry award. The iPave system, which was developed by Hanson Contracting, allows real-time reporting from construction sites and saves printing more than 22,700 forms and check lists every year. It won the TUC Trophy for worker involvement at the Mineral Products Association's annual health and safety awards in November.



### How spade work can help save water

Forget jet washing – sweeping and shovelling are the best ways to clean the yard for relief concrete plant supervisor Mike Lyon. "It saves litres of water, even when we have to damp down to prevent dust," said Mike, a health and safety rep for nine years before the role expanded to embrace wider elements of working sustainability. "We were already looking at environmental issues before the role changed, but now there's a lot more emphasis on energy, water and waste."



### Mill fan upgrade cuts energy use

A fan upgrade at the Purfleet Regen works in Essex has resulted in a 50 per cent reduction in energy on one of the grinding mills, reducing CO<sub>2</sub> emissions by 1,487 tonnes per year. The works uses two closed circuit ball mills and a vertical grinding mill to make Regen.

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## Summary of KPI performance against 2020 targets

	KPI	2020 target	2014 position	Status
People	Health and safety	Zero harm	LTI's reduced from 32 in 2013 to 31 in 2014. This is 51 per cent down on 2010 when it was 63	
	Stakeholder performance	Organise an annual stakeholder event for customers, suppliers, trade associations, community leaders and NGOs	Events were held in April and December	
	Environmental incidents and emissions	10 per cent year on year reduction in complaints based on 2010 figures	Complaints rose in 2014 but are still down by 33 per cent on 2010. This shows a greater reduction than the target 10 per cent year on year since 2010	
		Reduce NO <sub>x</sub> emissions by 20 per cent and dust by 10 per cent by 2020 based on 2010 data and maintain 2010 SO <sub>2</sub> level	Cement specific emissions of dust to air have decreased since 2013 and are 49 per cent down on 2010. NO <sub>x</sub> is down from 2013 but still 5 per cent up on 2010. Both are well below industry averages	
	Employment and skills	Meet the targets in the MPA 'Safer by Competence' programme	We are on target to meet the requirements by 2017	
	Local community	Hold at least five community events a year at every quarry	65 per cent of our sites held at least three community events during 2014 and two cement plants held open days	
Carbon	Energy efficiency	Reduce energy use by 5 per cent per tonne of product by 2020 based on 2010 baseline	Energy consumption per tonne increased by 2.9 per cent since 2013 and 6.5 per cent since 2010. This is influenced by product mix	
	Waste as fuel	Increase the use of biofuel to 35 per cent by 2020	Use of biofuel increased in 2014 to 16 per cent though is still below the 2010 level of 23 per cent	
	CO <sub>2</sub> emissions from production	10 per cent reduction in carbon emissions per tonne by 2020 based on 2010 baseline	Carbon emissions per tonne increased by 7 per cent since 2013 and 11 per cent since 2010. This is influenced by product mix	
	CO <sub>2</sub> emissions from transport	Reduce transport CO <sub>2</sub> emissions by 5 per cent per tonne by 2020 based on 2010 baseline	Transport emissions have reduced by 1.4 per cent since 2013 and 2.5 per cent since 2010	

	KPI	2020 target	2014 position	Status
Waste and raw materials	Waste minimisation	Reduce waste to landfill by 85 per cent per tonne by the end of 2020 based on 2010 figures	Waste to landfill per tonne decreased by 29 per cent since 2013 and 62 per cent since 2010.	
	Materials efficiency and recycling	Increase recycled materials in asphalt to 10 per cent by 2020 (excluding filler)	Use of recycled aggregates (mostly asphalt plantings) has increased by 1 per cent since 2013 and 2.5 per cent since 2010.	
		Increase the use of cement replacement materials in concrete to 45 per cent by 2020	Use of cement replacement materials has decreased slightly to 37.19 per cent since 2013	
		Increase the number of concrete plants recycling surplus concrete to 95 per cent by 2020	99 per cent of our concrete plants recycle surplus concrete	
	Product quality and performance	Reduce production waste by getting it Right first time	Customer complaints reduced	
Water and biodiversity	Water	Reduce mains water consumption by 25 per cent per tonne across the business by 2020 based on 2010	Mains water consumed per tonne decreased by 3 per cent since 2013 and 17.5 per cent since 2010	
		Reduce the sum of mains and abstracted water for concrete by 10 per cent per tonne by 2020 based on 2010	Mains water consumed per tonne by concrete increased by 13 per cent since 2013 and 2 per cent since 2010 and by building products decreased by 5 per cent since 2013 and 8.5 per cent since 2010	
	Biodiversity and site stewardship	All quarries to implement published biodiversity action plans	91 per cent of quarries have published BAPs (those without are being sold/closed)	

- = Target in danger of being missed
- = Additional work required to meet target
- = On target or already achieved

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## Providing solutions to enable sustainable construction

### Supply chain

Integrated delivery solutions around road, rail, barge and ship, and a national network of production facilities.

### Aggregate

Recycled blends available.

### Asphalt



ERA – low energy asphalt, high wear – low depth top courses.

### Concrete



EcoPlus – low embodied carbon due to high Regen content. Mixes also available with recycled aggregate.

### Cement

A range of reduced carbon cements through the use of alternative fuels and raw materials.



Regen – cement alternative, low embodied carbon, 100 per cent by-product source.

### Hanson UK

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