

Hanson UK

**Performance
and sustainability
summary report**





Down by
15.5%

Mains water use
per tonne of product

2020 TARGET PASSED

Down by
35%

Waste to landfill
per tonne of product

2020 TARGET PASSED

Down by
7.2%

CO₂ emissions
per tonne of product

2017
HIGHLIGHTS



FORS Gold
Standard for entire
Hanson fleet



Industry health
and safety award for
worker involvement



Biodiversity award for
SSSI translocation
project

Introduction,

by Daniel Cooper, chief executive officer, Hanson UK



2017 was a solid year of progress for Hanson UK. We took some big strides forward in our drive to invest in our people and our plant to achieve our vision of becoming the sustainable market leader.

Three major energy-saving capital projects – installing a new cement mill and rail loading facilities at Padeswood cement works in Flintshire, construction of two new marine aggregate dredgers and the redevelopment of our Victoria Deep water terminal in London – got under way, while several other projects aimed at reducing emissions and increasing efficiency were completed.

We continued with our craft apprenticeship training programme and introduced a new vocational apprenticeship for mobile and fixed plant operators. We also recruited another group of school-leavers and graduates onto our bespoke training programmes aimed at developing the next generation of supervisors and managers.

Our customer service offering continued to improve and we introduced a number of new developments, from more efficient and lower emission trucks, to better ways of sharing information using modern technology.

Safety remains our number one priority and this year the focus will also be on health and wellbeing through a company-wide programme of activities. There's no doubt that the wellbeing of our people impacts the success of our business. Healthy and happy people are much less likely to have accidents or be off sick and are more engaged with their work.

Areas for improvement:

- Lost time injuries and quest for zero harm
- Energy consumption
- CO₂ emissions from transport
- Dust emissions



Read the full report and see our new animation at hanson-sustainability.co.uk



Enabling sustainable construction

Nearly 50 representatives from major customers and key trade associations attended our sustainability workshop in October 2017, held at the Institution of Structural Engineers in London.

The meeting featured presentations on product development and innovation delivered by Dr Wolfgang Dienemann, HeidelbergCement's head of global research and development and Dr Enrico Borgarello, who heads the Group's global product innovation team in Bergamo, Italy.

In addition to the stakeholder workshops, we ran a series of seminars for architects, engineers and other specifiers about the sustainability benefits of Regen and we are developing concrete mixes with higher Regen content.

We work closely with our customers to help them deliver sustainability-based key performance indicators. At the Hinkley Point power station site in Somerset we are working with the client EDF and the main contractor to embed the nuclear safety culture in our supply chain for each product we supply, embracing health, safety and product quality.



40

new low-cab mixer trucks introduced

Investing in renewing our plants and in developing collaborative working projects



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People and communities

The number of people employed at January 1, 2018 was 3,595, an increase of 60 on the prior year. We continued to develop our talent pool and bring younger people into the business through our higher, craft and task-related apprentice programmes and a two-year graduate training scheme.

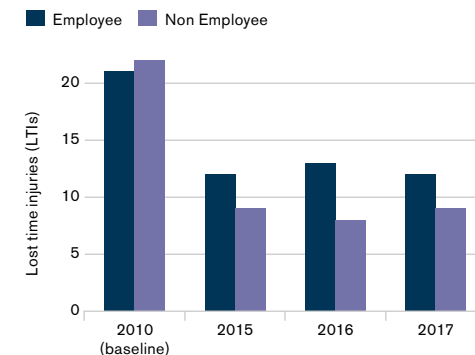
Our talent management and succession planning programmes continued, along with a leadership development programme for senior managers. We also invested in workplace training and competency, mainly focused on health, safety and environment. Earlier this year we introduced a fairness and respect commitment, which is fully supported by the executive team and is being sponsored and led by our asphalt and contracting managing director James Whitelaw.

The total number of lost time injuries (LTIs) remained static at 21, but the LTI frequency rate fell and a new record of 90 days without an LTI was set in May. This year the focus is also on health and wellbeing as we launch a company-wide programme of activities.

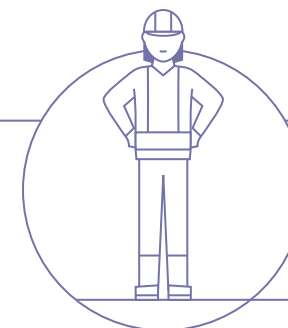
We held four public consultations during 2017 to present proposals for developing our sites. We promote visits to our sites, particularly from universities, schools and community organisations.

Emissions of dust, sulphur dioxide and oxides of nitrogen from our three cement plants remain well below the industry targets set in 2015.

2017 number of lost time injuries:



23,913
people visited
Hanson sites
in 2017



A diverse and inclusive company that's focused on health and wellbeing



Carbon and energy

Total energy consumption per tonne fell for the third consecutive year, and there was a 0.8 per cent fall in energy use per tonne of product from 2016.

We continued to invest in new technology and embed both best practice and energy awareness into the business.

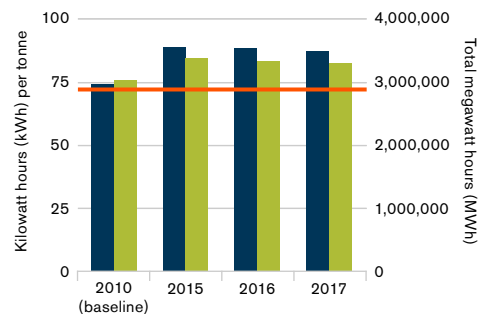
The use of waste derived fuels in our cement plants increased to 54 per cent of kiln energy consumption.

Emissions of CO₂ per tonne of product were down by 7.2 per cent from 2016 but CO₂ emissions from transport on a per tonne basis rose by one per cent during the year. This was principally due to an increase in delivery distances for aggregates and asphalt. Rail deliveries increased slightly for both aggregates and cement.

A project to optimise order handling and vehicle scheduling in the aggregates, asphalt and concrete business lines is ongoing. The aim is to improve vehicle use and reduce fuel costs.

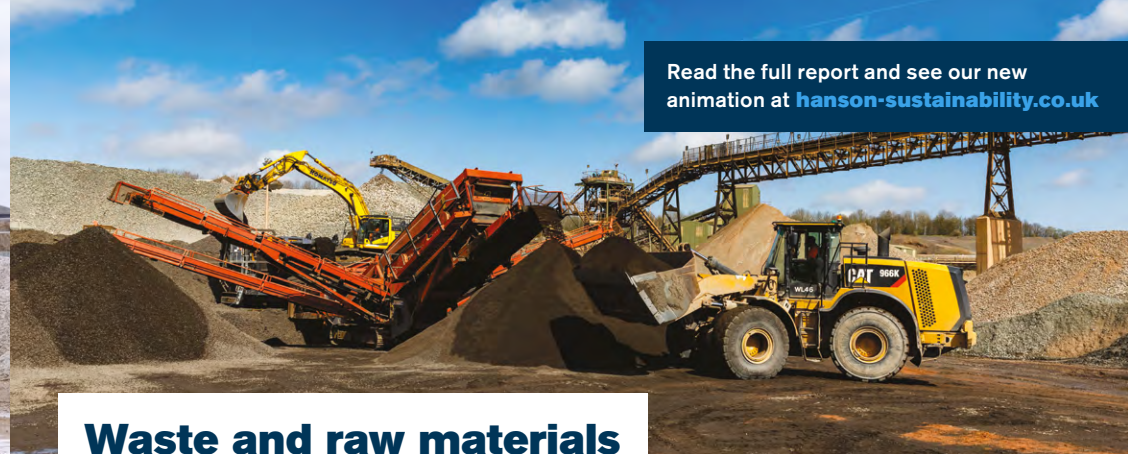
2017 energy consumption:

- Total megawatt hours (MWh)
- Kilowatt hours (kWh) per tonne
- 2020 target 72.05 kWh/tonne



More efficient, lower emission vehicles

Use of waste derived fuels in cement plants increased to **54%**



Waste and raw materials

Read the full report and see our new animation at hanson-sustainability.co.uk

We passed our 2020 target of an 85 per cent reduction in waste to landfill per tonne of product based on the 2010 baseline figure.

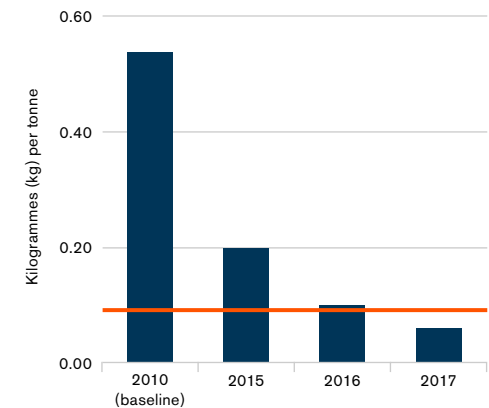
The target has been achieved through a company-wide commitment to operate efficiently and recycle or reuse as much waste as possible. The amount of waste sent to landfill in 2017 fell by 35 per cent on the prior year.

The amount of crushed road waste or recycled asphalt planings (RAP) used in new asphalt mixes increased to 14 per cent in 2017 and continues to rise, led by our subsidiary MQP which has one of the best records in the industry at 23 per cent.

The use of Regen in ready-mixed concrete means we have one of the highest cement replacement rates in the UK market and we are working towards our target of 45 per cent by 2020.

2017 waste to landfill:

- Kilogrammes (kg) per tonne
- 2020 target 0.09kg per tonne



Use of recycled asphalt planings increased to **14%**

Use of cement replacement on course for achieving our 2020 target of **45%**

Committed to conserving natural resources, minimising waste and improving material efficiency



Water and biodiversity

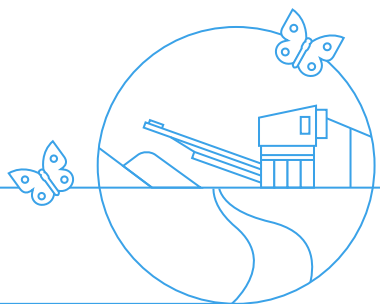
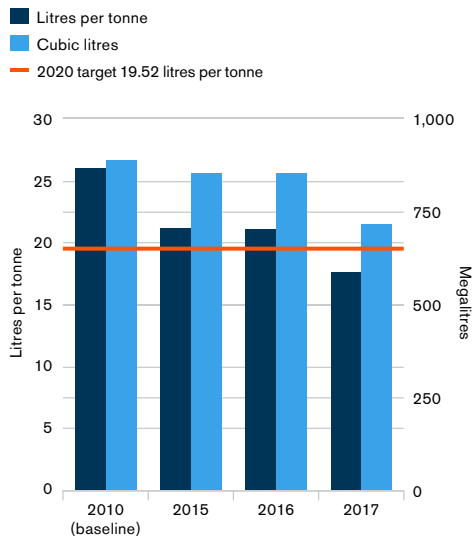
There was a 15.5 per cent fall in mains water use per tonne of product in 2017 following a concerted drive to identify and repair leaks.

We have passed our 2020 target to reduce mains water use by 25 per cent based on 2010 figures and are very close to meeting a 10 per cent reduction in total water use in concrete.

We are proud of the achievements we have made in promoting and increasing biodiversity at our sites, which have helped to create significant environmental benefits. We won the top prize in the biodiversity innovation category at the Mineral Products Association's biennial biodiversity and restoration awards at the Royal Society in London for a 20-year project to protect and preserve the *Alchemilla micans*, Britain's rarest lady's mantle, at Keepersfield quarry in Northumberland.

We are again participating in HeidelbergCement's biodiversity competition the Quarry Life Award, which was showcased as an example of best practice by the MPA at its awards event. Six projects will be carried out over the summer with the national and international prizes presented later in the year.

2017 mains water use:



Biodiversity and geodiversity action plans for all but one of our quarries



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Quality processes and systems

We have successfully embedded the requirements of the revised 2015 ISO standards (9001 and 14001) into our Integrated Management System (IMS).

An initial audit took place in 2017 and it is anticipated that full certification will be achieved well in advance of the October 2018 deadline.

We have also improved our information and data collection through the successful launch of new software called Intelix, which is being introduced throughout the HeidelbergCement Group.

Intelix captures safety conversations, incident and near hit reporting and will enable greater insight into the root cause of incidents and the sharing of lessons learned.

The BES 6001 Responsible Sourcing of Materials (RSM) standard is in place at all our production sites. Our subsidiary MQP was certified during the year and in the most recent audit, our aggregates and asphalt product lines rose from 'very good' to 'excellent'.

We continue to invest in development of new products, either working with external partners or HeidelbergCement's global research and development department.



Total water use per tonne of product down by **4.3%...**

...and on target for reducing total water use in concrete by **10%**

Overview,

by Marian Garfield, head of sustainability

A major development during the year was the launch of HeidelbergCement's Sustainability Commitments 2030 to replace its Sustainability Ambitions 2020.

The new aspirations from our parent company challenge us to find new solutions and think differently to make our business even more sustainable; they also set ambitious targets that the Group hopes to achieve by 2030.

As one of the leading business units within the Group, we are already closely aligned to many of the new commitments, which focus on six key areas of action along the entire value chain.

Looking ahead, many of our sustainability targets are set for 2020. Next year we will be redefining all these targets to support UK government ambitions and ensure they align with our parent company's commitments and other stakeholder interests as we strive for continuous improvement.



Safety will continue to be our top priority. Our focus will be on investigating incidents and near hits and communicating the lessons learned, embedding behavioural safety and promoting our success stories through the intranet and our employee magazine team.



Summary of KPI performance against 2020 targets				
	KPI	2020 target	2017 position	Status
People and communities	Health and safety	Zero harm.	Total LTIs static at 21. Employee LTIs down, non-employee LTIs up. LTIFR down at 1.64.	➔
	Stakeholder performance	Organise an annual stakeholder event for customers, suppliers, community leaders and NGOs.	Events were held in May and October.	⬆️
	Environmental incidents and emissions	10 per cent year on year reduction in complaints based on 2010 figures.	Complaints fell in 2017 to 143 and are down by 50 per cent on 2010. Target number for 2017 was 137.	⬆️
		Cement specific emissions: Reduce NO _x emissions by 20 per cent and dust by 10 per cent by 2020 based on 2010 data and maintain 2010 SO ₂ level.	NO _x down from 2016 by 1.8 per cent and 14.1 per cent down on 2010. Dust down since 2016 and is down by 18.5 per cent on 2010. SO ₂ rose by 65 per cent on 2016, 36% up on 2010.	⬆️
	Employment and skills	Meet the targets in the MPA 'Safer by Competence' programme.	Safer by competency 2017 target achieved.	◻️
	Local community	Hold at least five community events a year at every quarry.	65 per cent of our sites held at least four community events during 2017, the 2016 figure was 71 per cent however only for three events.	➔
Carbon and energy	Energy efficiency	Reduce energy use by five per cent per tonne of product by 2020 based on 2010 baseline.	Down by 0.8 per cent since 2016; remains 5.3 per cent up on 2010.	⬆️
	Waste as fuel	Increase the use of biofuel to 35 per cent by 2020.	Up by 7 per cent in 2017 to 21 per cent; 2010 level was 23 per cent.	⬆️
	CO ₂ emissions from production	10 per cent reduction in carbon emissions per tonne by 2020 based on 2010 baseline.	Down by 7.2 per cent since 2016, but 5.7 per cent up on 2010.	⬆️
	CO ₂ emissions from transport	Reduce transport CO ₂ emissions by five per cent per tonne by 2020 based on 2010 baseline.	Up by 1.0 per cent since 2016, but 1.3 per cent down since 2010.	⬇️
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.	Down by 35 per cent since 2016 and 88 per cent since 2010.	◻️
	Materials efficiency and recycling	Increase recycled materials in asphalt to 10 per cent by 2020 (excluding filler).	10.5 per cent recycled in 2017.	◻️
		Increase the use of cement replacement materials in concrete to 45 per cent by 2020.	38.3 per cent replacement in 2017. Industry average is 29 per cent (ref. Concrete Industry Sustainability Performance Report, 2015).	⬇️
		Increase the number of concrete plants recycling surplus concrete to 95 per cent by 2020.	100 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.	Down by 15.5 per cent since 2016 and 32.3 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.	Down by 6.2 per cent since 2016 and 9.96 per cent since 2010.	⬆️
	Biodiversity and site stewardship	All quarries to implement published biodiversity action plans.	100 per cent of quarries have published biodiversity action plans.	◻️

Energy consumption

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

2017 performance

- ◻️ Target achieved
- ⬆️ Improved
- ➔ No change
- ⬇️ Dropped

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



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

Concrete



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.



Cement alternative, low embodied carbon, 100 per cent by-product source.



Read the full report and see our new animation at
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