



**2019**



Hanson UK

**Performance  
and sustainability  
summary report**



Mains water use at historical low level

**2020 TARGET PASSED**



Waste to landfill per tonne of product

**2020 TARGET PASSED**



Environmental complaints at a five-year low

# 2018 HIGHLIGHTS



Environmental training programme developed and widened



£15 million investment to minimise cement dust emissions completed



Our contracting division achieved ISO 44001 certification



# Introduction,

by Simon Willis, chief executive officer, Hanson UK



**An essential element of our business is that we are in it for the long-term. Although we need to be nimble, adapt to changing markets and embrace modern technology, we must always have one eye firmly fixed on the future and how we develop our people, our assets and our mineral reserves.**

That's why sustainability is such an important element of what we do, and why we place so much emphasis on this critical but often misunderstood topic.

Sustainability is not just about reducing emissions and protecting the environment. It's about working efficiently, making a profit and investing in value-creating projects to grow the business; and it's about a range of people-related issues from health, safety and wellbeing to succession planning, diversity and adding value to the communities in which we operate.

We are working hard to ensure our employees are fully engaged, properly trained and empowered to take responsibility to drive forward ongoing improvements. Our 'One Team' philosophy is underpinned by a set of values and aspirations designed to make our people feel connected, involved and valued. This will allow us to deliver an improved service to our customers and strengthen the sustainability of the business.

## Areas for improvement:

- Employee lost time injuries and the quest for zero harm
- Gender pay gap
- Energy consumption and carbon emissions



Read the full report at  
[hanson-sustainability.co.uk](https://hanson-sustainability.co.uk)

## Enabling sustainable construction

**Around 40 representatives from major customers and key trade associations attended the latest of our industry-leading sustainability workshops held at the Crystal Centre in London's Docklands to talk about the challenges and opportunities of sustainable business.**

The accent was on transport, with guest speakers from Transport for London, Mercedes, our fleet car provider Pendragon and energy supplier EDF. Delegates were told about Hanson's ongoing commitment to rail, including new facilities at Padeswood cement works in north Wales, Tytherington quarry in South Gloucestershire and Ashton-in-Makerfield in Greater Manchester, and a refreshed approach to company cars, which will see the removal of light diesel vehicles, greater use of plug-in/hybrids and enhanced video conferencing to cut down on business miles.

We again ran a series of Continuous Professional Development (CPD) seminars for architects, engineers and other specifiers about Regen and we published Environmental Product Declarations (EPDs) for eight of our top selling concrete mixes, and we are using EPDs to highlight the improved environmental performance of concrete with higher Regen content.



**We published environmental product declarations for eight of our top selling concrete mixes**

## People and communities

**The number of people employed at January 1, 2018 was 3,541, a decrease of 54 on the prior year. The total number of lost time injuries (LTIs) fell by one from 21 to 20, but there was an increase in employee LTIs from 12 to 13.**

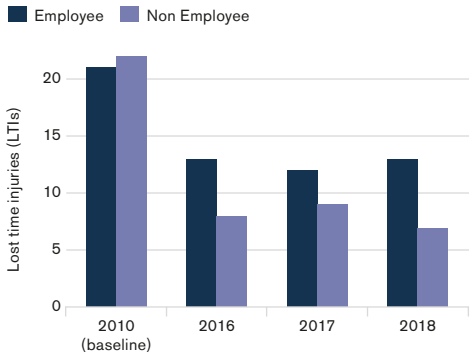
A new initiative to improve health and wellbeing was launched in January 2018. It included quarterly themed activities to support the campaign and a partnership with the mental health charity Mates in Mind.

Since the introduction of our fairness, inclusion and respect (FIR) policy in 2018, we have implemented a number of changes. These include improvements in maternity and shared parental leave; setting recruitment equality targets and launching an unconscious bias education programme.

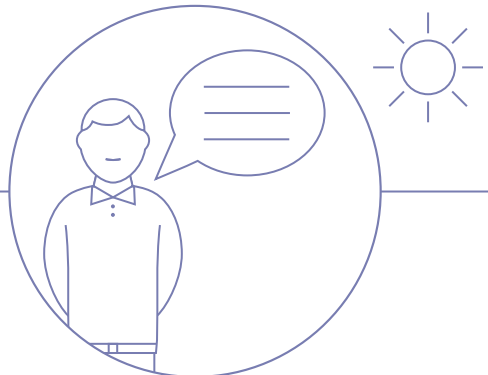
We continued to develop our talent pool and bring younger people into the business through our higher, craft and task-related apprentice programmes. We also run a successful graduate training programme.

Environmental complaints about our operations fell to 127, the lowest level for five years. Emissions of dust, oxides of nitrogen and sulphur dioxide from our three cement plants were well below industry targets set in 2015, reflecting the benefits of a £15 million investment programme.

### 2018 number of lost time injuries:



### Environmental complaints at a five-year low





## Carbon and energy

**Energy use per tonne of product rose by 3.1 per cent, heavily influenced by a fall in demand for ready-mixed concrete, which has the lowest energy intensity of all our products. CO<sub>2</sub> emissions per tonne of product rose in line with energy consumption.**

We are working with three universities – Reading, Cambridge and Swansea – on carbon reduction projects for our cement and Regen plants which have the potential to save over 50,000 tonnes of carbon annually. We are also investigating a number of additional collaborative research projects to reduce our carbon footprint.

A new cement grinding mill at Padeswood cement works in north Wales will deliver a 30 per cent reduction in electricity consumption for this part of the process. New bag filters on the mills at Ribblesdale and Ketton cement plants will reduce power consumption and improve thermal efficiency.

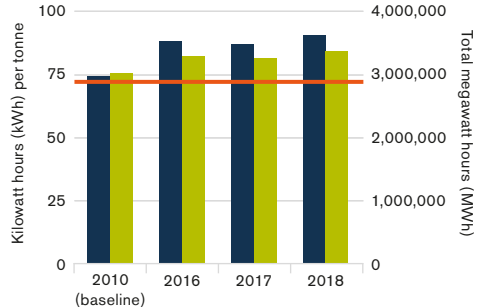
CO<sub>2</sub> emissions from transport on a per tonne basis rose by 1.8 per cent. Rail deliveries rose to 14.4 per cent and will increase further as investments linked to our strategy to reduce road deliveries come on stream.

**£15 million investment to minimise cement dust emissions completed**

The use of alternative fuels in cement production fell by two percentage points to 54 per cent of kiln energy consumption, but remained well above the European cement industry's average of 44 per cent.

### 2018 energy consumption:

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



## Waste and raw materials

**We remain ahead of our 2020 target of an 85 per cent reduction in waste to landfill per tonne of product based on the 2010 baseline figure, despite a two per cent year-on-year increase in 2018.**

This increase was largely due to an improvement project at Gosport concrete plant in Hampshire where we installed a new waste recycling facility including rain and groundwater collection, but had to remove around 200 tonnes of mixed material that could not be recycled. The new facility will virtually eliminate production waste.

We are continuing our programme of investing in washing plants at our quarries to create a manufactured sand for use in concrete as a substitute for land-won and marine sand.

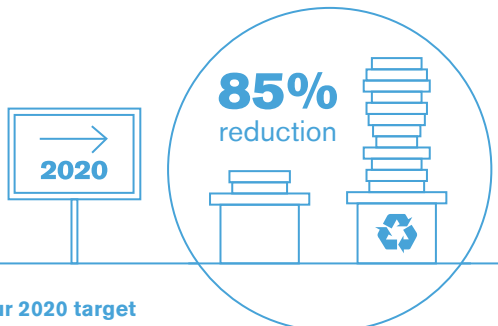
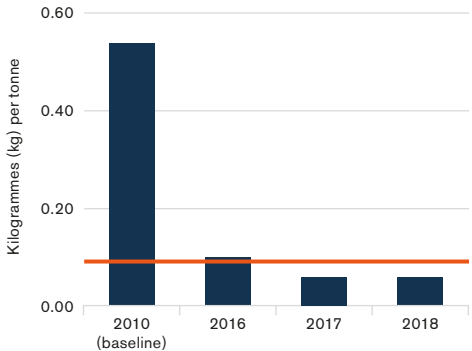
All the bypass dust generated at our cement plants continues to be diverted from landfill. We are working on a research project to look at the potential to turn this material into an inert, non-hazardous product.

The average amount of recycled asphalt planings (RAP) used in new asphalt mixes remained above our 10 per cent target for the third successive year. However, the average amount of Regen used in ready-mixed concrete fell to 36.7 per cent, reflecting changes in market demand, regional variations and a lack of customer awareness.

The use of alternative raw materials in cement increased to 12.1 per cent – the second highest on record. All our concrete plants are recovering at least half of their process waste, surpassing our 2020 target of 95 per cent.

### 2018 waste to landfill:

- Kilogrammes (kg) per tonne
- 2020 target 0.08kg per tonne



**Waste to landfill ahead of our 2020 target**

## Water and biodiversity

**We remain ahead of our 2020 target to reduce mains water use by 25 per cent based on 2010 figures and have met our 10 per cent reduction target in total water use in concrete.**

The use of mains water fell to its lowest recorded level of 17.5 litres per tonne of product, while absolute mains water use also fell. This was due principally to a reduction of nearly a quarter of water use in the cement business, achieved through a concerted drive to identify and repair leaks and greater use of recycled water. We now have smart meters at 25 of our biggest water-using sites, allowing better management.

The use of controlled water also fell, both on an absolute and per tonne basis.

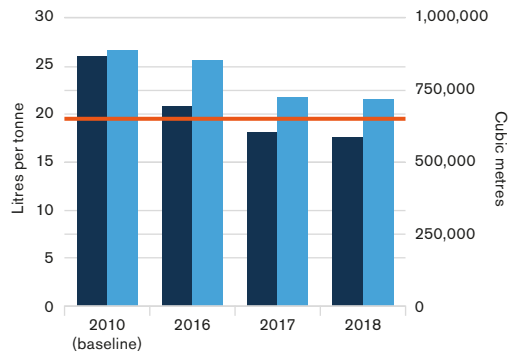
We have biodiversity action plans (BAPs) in place for all our quarries along with a number of geodiversity action plans (GAPs).

Eight of our quarries participated in the fourth edition of HeidelbergCement's biennial biodiversity research competition, the Quarry Life Award (QLA).

The 2018 competition was run in 25 countries across the globe, offering academics and students as well as community groups from universities and further education institutions the chance to win up to £27,000 by finding new ideas for the conservation and promotion of biodiversity in quarries.

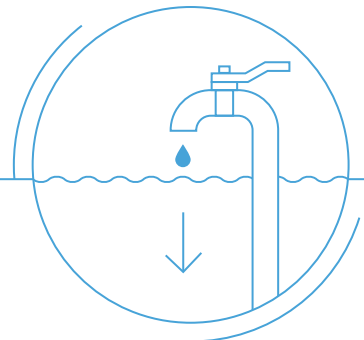
### 2018 mains water use:

■ Litres per tonne ■ Cubic metres  
— 2020 target 19.52 litres per tonne



**25**

water-using sites have fitted smart meters



**Mains water use at historical low level and ahead of 2020 target**



## Quality processes and systems

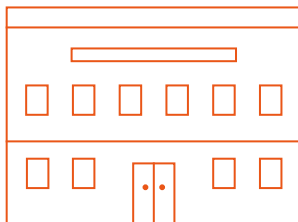
**We have successfully embedded the requirements of the revised 2015 ISO standards (9001 and 14001) into our integrated management system (IMS) and received full certification in advance of the October 2018 deadline.**

We have improved our information and data collection through the 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.

Contracting division achieved ISO44001 certification, a new international standard for collaborative working, during the year for highways work carried out for major clients.

Customer complaints around product quality rose during the year. As a result we have introduced a programme of further training and development for our operational and sales office staff, along with investment in new plant and machinery, to avoid issues arising from plant failures, batching errors or product specifications. A new quality control system has been introduced into the cement business line which will allow greater insight into the cause of complaints and ensure corrective action is taken.

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



**Our contracting division  
achieved ISO 44001 certification**



# Plotting a road map for the next decade

by Marian Garfield, head of sustainability



Over the last 12 months we have been discussing and developing a forward-looking sustainability strategy to guide us through the next decade. Our current indicators and targets, which were set in 2011 and run to 2020, need to be updated to reflect an ever-evolving sustainability agenda and changing priorities amongst all our stakeholders.

Between March and May 2018 we carried out a series of formal consultations involving the leadership team, over 100 employees and an external stakeholder group including customers and sector associations. The overarching messages were clear:

- The six HeidelbergCement 2030 sustainability commitments should be used as a basis for future reporting, but with some name changes to clarify the objectives for the UK market, and the inclusion of the topic 'Enabling sustainable construction'.
- The UN sustainable development goals should be adopted and linked to the key topic areas to show we are in line with global action.
- The future approach must be easily communicated at all levels of the organisation.

A list of around 70 indicators has now been created, of which 40 are already covered in our existing approach; others reflect new interests, in particular those introduced by Heidelberg Cement's commitments. Around 30 of the indicators will have targets, the rest will be monitored and reported.

**The general proposals have been fed back to everyone involved in the consultation and were presented at our annual stakeholder day in September 2018. The indicators, objectives and targets are now being refined and finalised prior to publishing, and will provide us with a firm base on which to build the future of the business.**

## Summary of KPI performance against 2020 targets

	KPI	2020 target	2018 position	Status
People and communities	Health and safety	Zero harm.	Total LTIs down to 20. Employee LTIs up, non-employee LTIs down. LTIFR up to 1.77.	⬆️
	Stakeholder performance	Organise an annual stakeholder event for customers, suppliers, community leaders and NGOs.	Events were held in May focussing on the 2030 sustainability strategy; and in September when sustainable transport was the main theme.	□
	Environmental incidents and emissions	10 per cent year on year reduction in complaints based on 2010 figures.	Complaints fell in 2018 to 127 and are down by 56 per cent on 2010. Target number for 2018 was 123.	⬆️
		Cement specific emissions: 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.	NO <sub>x</sub> down from 2017 by 9 per cent and 22 per cent down on 2010. Dust down since 2017 and is down by 54 per cent on 2010. SO <sub>2</sub> fell slightly on 2017, 35 per cent up on 2010.	⬆️
	Employment and skills	Meet the targets in the MPA 'Safer by Competence' programme.	Safer by competency 2018 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 2018, unchanged from 2017.	➡️
Carbon and energy	Energy efficiency	Reduce energy use by five per cent per tonne of product by 2020 based on 2010 baseline.	Up by 3.1 per cent since 2017; now 8.4 per cent up on 2010.	⬇️
	Waste as fuel	Increase the use of biomass in fuel to 35 per cent by 2020.	Down by 2 per cent on 2017 to 19 per cent; 2010 level was 24 per cent.	⬇️
	CO <sub>2</sub> emissions from production	10 per cent reduction in carbon emissions per tonne by 2020 based on 2010 baseline.	Up by 2.4 per cent since 2017; now 7.9 per cent up on 2010.	⬇️
	CO <sub>2</sub> emissions from transport	Reduce transport CO <sub>2</sub> emissions by five per cent per tonne by 2020 based on 2010 baseline.	Up by 1.8 per cent since 2017; 2.1 per cent up 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.	Up by 2 per cent since 2017 but 88 per cent down since 2010.	□
	Materials efficiency and recycling	Increase recycled materials in asphalt to 10 per cent by 2020 (excluding filler).	11.0 per cent recycled in 2018.	□
		Increase the use of cement replacement materials in concrete to 45 per cent by 2020.	36.7 per cent replacement in 2018. 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.	Improved customer complaint system introduced.	⬇️	
Water and biodiversity	Water	Reduce mains water consumption by 25 per cent per tonne across the business by 2020 based on 2010.	Down by 2.5 per cent since 2017 and 32.7 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.	No change from 2017 and 10.0 per cent down since 2010.	□
	Biodiversity and site stewardship	All quarries to implement published biodiversity action plans.	100 per cent of quarries have published biodiversity action plans.	□

■ On target or already achieved

■ Additional work required to meet target

■ Target in danger of being missed

### 2018 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 at

[hanson-sustainability.co.uk](https://hanson-sustainability.co.uk)

## Hanson UK

14 Castle Hill, Maidenhead, Berkshire SL6 4JJ

T: 01628 774 100 E: [enquiries@hanson.com](mailto:enquiries@hanson.com) [@Hanson\\_UK](https://twitter.com/Hanson_UK) [hanson.co.uk](https://www.hanson.co.uk)

