



**Hanson UK
Performance and
sustainability summary
report and 2030 commitments**

A rare breeding pair of cranes chose to nest at RSPB Ouse Fen, created by the Hanson-RSPB Wetland Project. Image supplied courtesy of the RSPB.





Waste to landfill
reduced by 86%
from 2010



Mains water
reduced by 31%
from 2010



Environmental complaints
reduced by 58% from
2010 and lowest
number recorded

2019 HIGHLIGHTS



Environmental training
award received from
the Institute of
Environmental
Management and
Assessment



Lost time injury
frequency rate
lowest recorded
since 2010



Significant reductions
in sulfur oxides (47%),
nitrogen oxides (15%)
and particulate (42%)
from our cement
operations since 2010



Introduction,

by Simon Willis, chief executive officer, Hanson UK



Welcome to our performance and sustainability summary report for our 2019 operations. In it we highlight our progress towards the 2020 targets we set ourselves in 2010.

As part of the global HeidelbergCement Group, we work across four divisions: concrete, aggregates, cement, and asphalt and contracting.

We are in our business for the long-term which is why we place so much emphasis on sustainability. We always have one eye on the future and how we develop our people, our assets and our mineral reserves.

While reducing emissions and protecting the environment are core to our operational focus, sustainability now encompasses much more. It's also about people, from health, safety and wellbeing to diversity and working with the communities where we operate.

I'm pleased to report the improvements against our 2010 baseline include cutting landfill waste by 86 per cent, reducing mains water use by 31 per cent, making significant reductions in emissions from our cement operations. We also achieved our lowest lost time injury frequency rate.

In the final section, we look to the future and how we are building on our 2020 sustainability goals with our 2030 Commitments.

Areas for improvement:

- Employee lost time injuries and the quest for zero harm
- Further energy use and carbon emission reduction needed
- Cement replacement materials below target but exceeding industry average



Read the full report at
hanson-sustainability.co.uk

Enabling sustainable construction

The circular economy (CE) – the idea of continually reusing, refurbishing and recycling to eliminate waste – was the theme of our industry-leading sustainability Stakeholder Day.

More than 60 customers, suppliers, partners and industry colleagues joined us for seven expert presentations and a workshop looking at how our sector can contribute to the CE.

Guest speakers discussed aspects of the CE around:

- The UK Green Building Council's new guidance document
- Heathrow's expansion plans
- The materials, waste and innovation sections of the 2018 scheme of the Building Research Establishment Environmental Assessment Method
- London's predicted population growth and the need for waste avoidance and effective resource management.

Delegates heard 'enabling the CE' is one of Heidelberg Cement's sustainability themes and is closely integrated with two other focuses, 'reducing our environmental footprint' – particularly carbon – and 'driving economic strength and innovation'.

With global uncertainty and a challenging market, it is even more important we invest in sustainable solutions, and continue to innovate and collaborate to improve sustainability, including developing the CE.

A recent example is the launch of a range of reduced emission asphalt (REA) to help reduce energy use and minimise the impact of production and laying on local air quality. Its specialist binder reduces emissions by an average of 40 per cent compared to conventional bitumen.

Every kilometre switched to REA is estimated to have "a similar effect" as planting 16 trees "or" a similar impact on the reduction of nitrogen dioxide as taking 40 cars off the road.

People and communities

We employed 3,662 people as at 1 January 2019 – 121 more than the previous year with new full time equivalent roles replacing some contractors.

Over the year, employee lost time injuries (LTI) almost halved, falling from 13 to seven, and the total LTI figure also dropped, from 20 to 19 – our lowest for many years. The lost time injury frequency rate was the lowest recorded in a decade.

Our health and wellbeing strategy now includes mental health first aider training while our new charity volunteering policy enables our people to take one day's paid leave a year.

We were pleased to be recognised with an Above and Beyond Award for our 20-year commitment to industry charity CRASH.

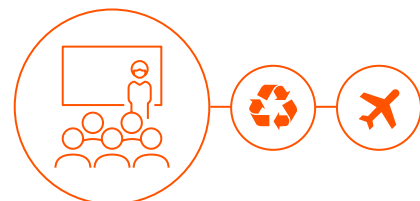
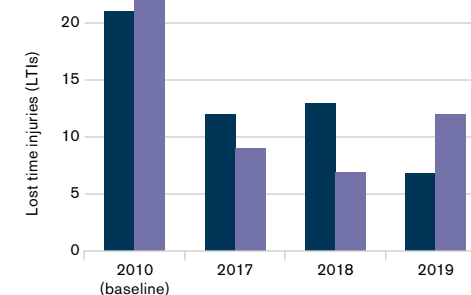
We have continued to work on creating a more diverse workforce and inspiring more people to consider careers in our industry by further expanding our Fairness, Inclusion and Respect policy. We have also adopted the 10 steps recommended by the Women in Science and Engineering (WISE) campaign.

Recruiting talent and developing employees are both long-standing objectives and we continue to invest in apprenticeships, our early career Leadership, Education and Development programme and our graduate scheme.

Environmental complaints fell to 119, an all-time low and a 58 per cent reduction since 2010. A £19 million investment programme across our three cement plants has led to significant falls in the emissions of dust (42 per cent), oxides of nitrogen (15 per cent) and sulfur dioxide (47 per cent) from our 2010 baseline.

2019 number of lost time injuries:

■ Employee ■ Non Employee



Our sustainability Stakeholder Day discussed what we can do for the circular economy



Lost time injury frequency rate lowest recorded since 2010



Carbon and energy

Energy use per tonne of product rose by 3.1 per cent and carbon emissions by 1.8 per cent from 2018 to 2019 influenced by a fall in demand for ready-mixed concrete, which has the lowest energy intensity of all our products, and thus demonstrates the influence of product mix on our overall figures.

Our carbon reduction projects include working with Swansea University to use hydrogen as a fuel at our Port Talbot Regen plant. We also partnered with the Mineral Products Association (MPA) and won the government's industrial fuel switching competition to carry out a "world first" demonstration of net zero kiln fuel mix using hydrogen and biomass.

Alternative fuel use in cement production rose by three per cent to 55 per cent of kiln energy and is well above the European cement industry's average of 44 per cent. There was also a small increase in the carbon neutral biomass part of the fuel mix to 20 per cent.

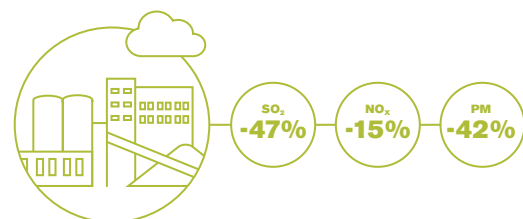
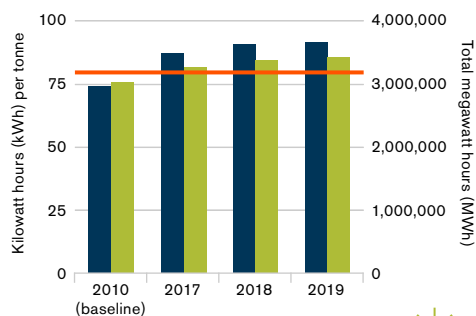
On transport, our CO₂ emissions dropped by five per cent, although there was a five per cent rise per tonne of product delivered.

CO₂ emissions have reduced for cement, but increased for aggregates and concrete because the average distance travelled per tonne has increased which represents 76 per cent of total deliveries by weight.

Our decision to order a new marine aggregate dredger will bring sustainability benefits, such as improved fuel consumption and delivering aggregates by sea to the Hinkley Point C nuclear power station will avoid tens of thousands of lorry journeys during its construction.

2019 energy consumption:

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



Significant reductions from
our cement operations since 2010

Waste and raw materials

Although waste to landfill increased slightly in 2019, we have exceeded our 2020 target of an 85 per cent cut per product tonne – based on 2010's figure – by one per cent. All our concrete plants are now capable of recycling surplus concrete exceeding our goal of 95 per cent of concrete plants.

We have continued our programme of investing in quarry washing plants to create a manufactured sand for use in concrete as a substitute for land-won and marine sand.

In our cement operations, we continue to send all bypass dust – a by-product generated during production – for use as fertiliser/soil improver instead of to landfill.

During 2019 we carried out an industrial scale trial to carbonate the dust using waste gases. The initiative converts the material into a non-hazardous product and, at the same time, captures some of the sites' CO₂ emissions.

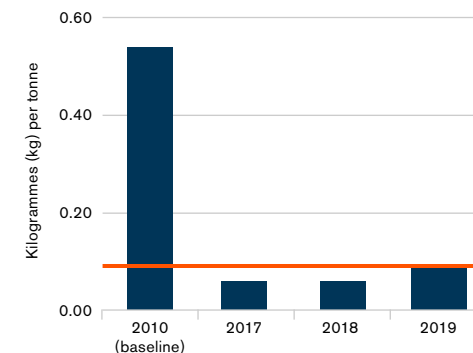
The average amount of recycled asphalt planings (RAP) used in new asphalt mixes rose to 12.2 per cent, up 1.2 per cent on 2018.

In concrete production, the average amount of Regen, a cement substitute offering better sustainability, reduced very slightly to 36.3 per cent, reflecting changes in demand, regional variations and a lack of customer awareness.

The involvement of the technical team after loads are returned following complaints has resulted in a 12 per cent reduction in production waste as more material is being re-purposed.

2019 waste to landfill:

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



Waste to landfill reduced
by 86 per cent from 2010





Water and biodiversity

Our total water consumption, which includes water abstraction, is down by almost 20 per cent, thanks mainly to a drive in our cement and aggregates operations to identify and repair leaks, and use more recycled water.

In cement, in particular, mains water consumption fell to its lowest ever level of 8.5 litres per tonne while abstracted water use increased from 2017 due to production changes at Ribblesdale cement works. Our understanding of abstracted water usage has improved significantly within the business since 2010.

While we have exceeded our overall mains water reduction target of 25 per cent by 6.4 per cent since 2010, our usage this year is up slightly on 2018.

Our 10 per cent reduction target for water use in concrete production was not reached, though we have achieved a cut of 5.3 per cent since 2010.

Among 2019's restoration projects, we created 30 hectares of wetlands at our Newington and Misson quarry in Nottinghamshire. Also in the county, our former Newington South quarry is being restored to create 11 hectares of reedbeds and 19 hectares of wet grassland in the hope of attracting a wide range of wildlife including snipe, bittern, otters and water voles. We have worked with Nottinghamshire Wildlife Trust on both projects.

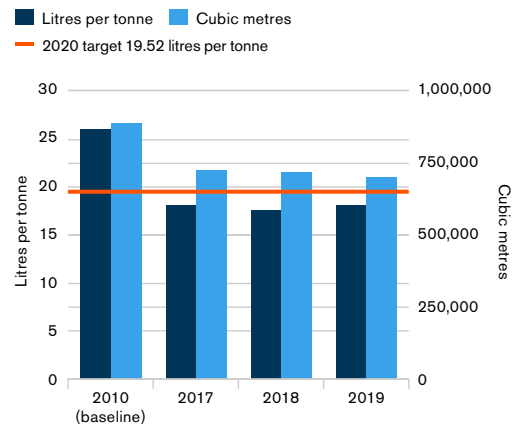


Mains water reduced by 31 per cent from 2010

We are the proud winners of the Biodiversity Innovation award at 2019's MPA restoration and biodiversity awards for our Floodplain Forest nature reserve at our former Manor Farm quarry near Milton Keynes.

Our In at the Start community engagement project with High Batts nature reserve at our Ripon quarry in North Yorkshire was a highly commended runner-up, while our entry to restore quarry benches at Batts Combe quarry in Somerset was commended.

2019 mains water use:



Read the full report at
hanson-sustainability.co.uk

Quality processes and systems

Quality is built into the integrated management system (IMS) that supports all our operations. The following international standards have now been successfully embedded into it; ISO 9001 (quality), ISO 14001 (environment), ISO 45001 (the health and safety standard that replaces OHSAS 18001) and ISO 50001 (energy). We are also reviewing the Carbon Management in Infrastructure Standard (PAS 2080) for potential future inclusion.

We have created procedures and reporting methods for the new Streamlined Energy and Carbon Reporting Regulations which require us to disclose our energy and carbon emissions in our statutory financial reports.

Quality is especially important when we supply concrete for the Hinkley Point C (HPC) nuclear power station in Somerset. We operate five site plants and production in 2019 reached a record level with daily output peaking at 1,600 cubic metres in February.

As the HPC team need to demonstrate their ability to consistently meet all customer and applicable statutory and regulatory requirements, our plants work to the enhanced quality procedures for the nuclear industry in ISO 19443. We are now considering including this certification in our IMS.

Our investment in new product development continues with external partners and Heidelberg Cement's global research and development team. In our contracting and asphalt business, the innovative Energy Reducing Asphalt (ERA) 140 has been recognised with certification from industry quality body BBA HAPAS.

The accreditation came following a trial carried out for Highways England on a section of the M4. As well as performance and safety benefits, ERA 140 uses less energy to produce so creates fewer carbon emissions.



Environmental training award received from the Institute of Environmental Management and Assessment

Summary of KPI performance against 2020 targets				
	KPI	2020 target	2019 position	Status
People and communities	Health and safety	Zero harm.	Total LTIs down to 19, employee LTIs down, non-employee LTIs up. LTIFR down to 0.95 from 1.77 in 2018.	▲
	Stakeholder performance	Organise an annual stakeholder event for customers, suppliers, community leaders and NGOs.	Event held in July at The Crystal in London focusing on the circular economy.	■
	Environmental incidents and emissions	10 per cent year on year reduction in complaints based on 2010 figures.	Complaints fell in 2019 to 119 and are down by 58 per cent on 2010.	▲
		Cement specific emissions: reduce NO _x emissions by 20 per cent, dust by 10 per cent and maintain SO ₂ level by 2020 based on 2010 data.	NO _x down by 15 per cent from 2010. Dust down 42 per cent from 2010. SO ₂ down 47 per cent from 2010.	▲
	Employment and skills	Meet the targets in the MPA 'Safer by Competency' programme.	Safer by Competency 2018 target achieved.	■
	Local community	Hold at least five community events a year at every quarry.	41 per cent of sites held at least four community events during 2019, down from 2018.	▼
Carbon and energy	Energy efficiency	Reduce energy use by five per cent per tonne of product by 2020 based on 2010 baseline.	Up by 2.3 per cent since 2018; now 8.7 per cent up on 2010.	▼
	Waste as fuel	Increase the use of biomass in fuel to 35 per cent by 2020.	Level remaining steady with a slight increase from 19.4 per cent in 2018 to 19.8 per cent; 2010 level was 24 per cent.	➤
	CO ₂ emissions from production	10 per cent reduction in carbon emissions per tonne by 2020 based on 2010 baseline.	Up by 1.8 per cent since 2018; now 9.6 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 five per cent since 2018 though our overall CO ₂ emissions dropped by five per cent.	▼
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 17 per cent since 2018 but 86 per cent down since 2010.	■
	Materials efficiency and recycling	Increase recycled materials in asphalt to 10 per cent by 2020 (excluding filler).	12.2 per cent recycled in 2019 up from 11.0 per cent recycled in 2018.	■
		Increase the use of cement replacement materials in concrete to 45 per cent by 2020.	Remains steady at 36.3 per cent replacement in 2019 exceeding industry average of 26.2 per cent (ref. Concrete Industry Sustainability Performance Report, 2018).	➤
		Increase the number of concrete plants recycling surplus concrete to 95 per cent by 2020.	All concrete plants recycle surplus concrete.	■
Product quality and performance	Reduce production waste by getting it right first time.	The involvement of the technical team after loads are returned has resulted in a 12 per cent reduction in production waste from 2018 as more material is being re-purposed.	■	
Water and biodiversity	Water	Reduce mains water consumption by 25 per cent per tonne across the business by 2020 based on 2010.	Up two per cent since 2018 but 31.4 per cent decrease since 2010.	■
		Reduce the sum of mains and abstracted water for concrete by 10 per cent per tonne by 2020 based on 2010.	Up 4.2 per cent from 2018 but still 5.3 per cent down since 2010.	▼
	Biodiversity and site stewardship	All quarries to implement published biodiversity action plans.	All of quarries have published biodiversity action plans.	■

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

2019 performance

■ Target achieved ▲ Improved ➤ No change ▼ Dropped

2030 COMMITMENTS



Plotting a road map for the next decade by Marian Garfield, head of sustainability

Ahead of the final year of reporting on our current sustainability targets and indicators, we have developed and launched an expanded strategy to take us forward through the new decade.

- Resource use and the circular economy
- Being a good neighbour
- Fairness, inclusion and respect

Our 2030 Commitments have been drawn up after two years of extensive consultations with our employees and external stakeholders, including customers and industry associations, to reflect the ever-evolving sustainability agenda.

We have also adopted and linked the 17 United Nations sustainable development goals to the strategy's key areas to demonstrate we are in line with global action.

Our 2030 Commitments will build on the success of our 2020 objectives, which were set in 2010. Many of the initiatives launched to address them are continuing through the new strategy, which we will be tracking and reporting on in future years.

At their heart are the six sustainability commitments of our parent company, the HeidelbergCement Group:

- Business and product innovation
- Health, safety and wellbeing
- Environmental responsibility

2030 COMMITMENTS

Sixty-two indicators have been created to reflect the interests of each sustainability topic. Most indicators have specific targets to be achieved by 2030 with the remainder being monitored and reported on. As with our 2020 goals, we will track the key indicators, in future sustainability reports.

Key topic	Hanson 2030 Commitments	United Nations Sustainable Development Goals
Business and product innovation	We will ensure continuous business improvement through the effective management of all processes and resources and the continuing innovation of product and services.	
Health, safety and wellbeing	We will ensure health and safety is our number one priority and are committed to continuously enhancing the health, safety and wellbeing of our employees and contractors.	
Environmental responsibility (air, carbon and energy, land use and water)	We are committed to fulfilling our share of the responsibility to keep the global temperature below 2° Celsius and we will continue to reduce our impacts on air, land and water.	
Resource use and the circular economy	We will conserve natural resources by avoiding or reusing waste and by continuously increasing the use of alternative resources as substitutes for natural raw materials.	
Being a good neighbour	We are committed to making a positive contribution to the communities around our operations and ensuring transparent communication to our stakeholders.	
Fairness, inclusion and respect	We will be a fair, respectful and inclusive company; encouraging a culture that values openness and transparency and recognises individual achievement.	

Sustainability Policy

Key sustainability topics

Effective management of safety, health, environment, quality, energy, carbon reduction, and responsible sourcing is of key importance to the sustained success of our business. We have a single sustainability policy, which is regularly reviewed and communicated to employees, contractors, visitors, key stakeholders and our supply chain to inform and promote wider adoption of responsible practices.

As a minimum, we comply with all applicable legal and regulatory requirements. Co-operation in the effective implementation of the policy is a condition of employment, partnership and supply.

Business and product innovation

We will ensure continuous business and product innovation. We:

- Engage with our stakeholders to encourage innovative development of our products, services and manufacturing systems to continually improve our sustainability performance
- Inform our customers about the functional, environmental and safety performance of our products
- Adopt a systematic and integrated approach and are committed to achieving the highest standards in complying with ISO 9001, ISO 14001, ISO 45001, ISO 50001, BES 6001, National Highway Sector Scheme 16 and the relevant CE certification marking schemes.

Health, safety and wellbeing

We will ensure Hanson is a safe and healthy place to work. We:

- Are committed to eliminating risk in the workplace through monitoring performance and implementation of best practice
- Develop and implement action plans to ensure the health, safety and mental wellbeing of our employees and have enhanced occupational health surveillance for their benefit.

Environmental responsibility

We are committed to fulfilling our share of the responsibility to keep the global temperature rise below 2° Celsius and we will continue to reduce our impact on air, land and water. We:

- Have stringent targets to reduce emissions to air from all our operations
- Will transition our operational fleets from traditional combustion engines to alternative forms of energy and, through collaboration with suppliers, our fleets will be more efficient through new technology
- Set science-based targets to reduce carbon emissions and energy consumption, reduce the use of fossil fuel through efficiency improvements and the use of alternative and renewable sources
- Seek to apply the principles of environmental stewardship throughout our operations by managing and restoring our sites to ensure land remains of value; implementing biodiversity net gain and safeguarding geodiversity where appropriate
- Use water efficiently, recycle where possible and protect water quality.

Resource use and the circular economy

We will conserve natural resources. We:

- Use resources appropriately and sustainably and, where possible, substitute primary resources with alternative materials
- Adopt the waste hierarchy of waste prevention, reuse of materials, recycling, co-processing and energy recovery to minimise waste disposal and maximise productivity
- Develop products that improve the quality and sustainability of the built environment and seek to eliminate all non-conforming products.



Being a good neighbour

We are committed to making a positive contribution to the communities close to our operations and ensuring transparent communication to all our stakeholders. We:

- Identify and consult with local community stakeholders close to our operations
- Have a programme of employee volunteering days to work on community projects
- Provide employment, economic activity using local sourcing and local businesses where practical; and build our own business on the basis of responsible practices
- Will develop an overall measure of social value to reflect the influence our operations have on the community.



Fairness, inclusion and respect

We will be a fair, respectful and inclusive company; encouraging a culture that values openness and transparency and recognises individual achievement. We:

- Strive for the fair treatment of all our employees and everyone in our supply chain
- Value our workforce and, by recruitment, selection and development of employees, contractors and suppliers, ensure they are appropriately skilled and competent to carry out their roles.



Summary of KPI 2030 targets		
	KPI	2030 target
Business and product innovation	Reduce carbon impact of our products.	15 per cent reduction 2016 – 2030 (science-based target).
	Sites operating with full IMS certification, ISO 9001, ISO 14001, ISO 50001, ISO 45001, BES 6001.	All sites.
Health, safety and wellbeing	Reduce number of potentially fatal incidents.	50 per cent reduction.
	Implementation of annual health and safety improvement plan and health and wellbeing improvement plan.	All sites.
Environmental responsibility (air)	Renewal of fleet with electrical/hybrid engines (cars, vans, large goods vehicles and quarry mobile plant).	All car fleet, 50 per cent van fleet (by 2025), collaborate with suppliers to enable more efficient LGV and YMS through new technologies.
	Reduce NO _x , SO ₂ and dust emissions from cement operations.	40 per cent reduction in NO _x , SO ₂ and dust emissions from cement operations from 2016 baseline.
Environmental responsibility (carbon and energy)	Reduce CO ₂ emissions from operations.	15 per cent reduction 2016 – 2030 (science-based target).
Environmental responsibility (land use)	Biodiversity net gain.	Fully integrated system within business.
Environmental responsibility (water)	Reduce mains/abstracted water consumption.	10 per cent reduction from end 2018, water management plans for sites with water scarcity by 2025 and all sites by 2030.
Resource use and the circular economy	Recycled/by-product used within our products.	Maximise RAP, Regen and alternative fuel usage. Utilise recycled aggregates where possible.
	Reduce non-product site and landfill waste.	Reduce non-product site waste by 20 per cent and waste to landfill by 50 per cent from 2018 levels.
Being a good neighbour	Volunteering.	One day per employee per year.
	Social value measurement.	Fully integrated system within business.
Fairness, inclusion and respect	Women in employment.	10 per cent in operational roles. 20 per cent overall.
	Diversity.	Identify and integrate into our culture diversity-related requirements of our employees.

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.

REA – Reduced emission asphalt products help to minimise the impact of asphalt production and laying on local air quality.

Concrete

EcoPlus Low embodied carbon due to high Regen content.
REGEN 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.



Read the full report at

hanson-sustainability.co.uk

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