



SUSTAINABILITY REPORT 2020–2021



Executive Summary

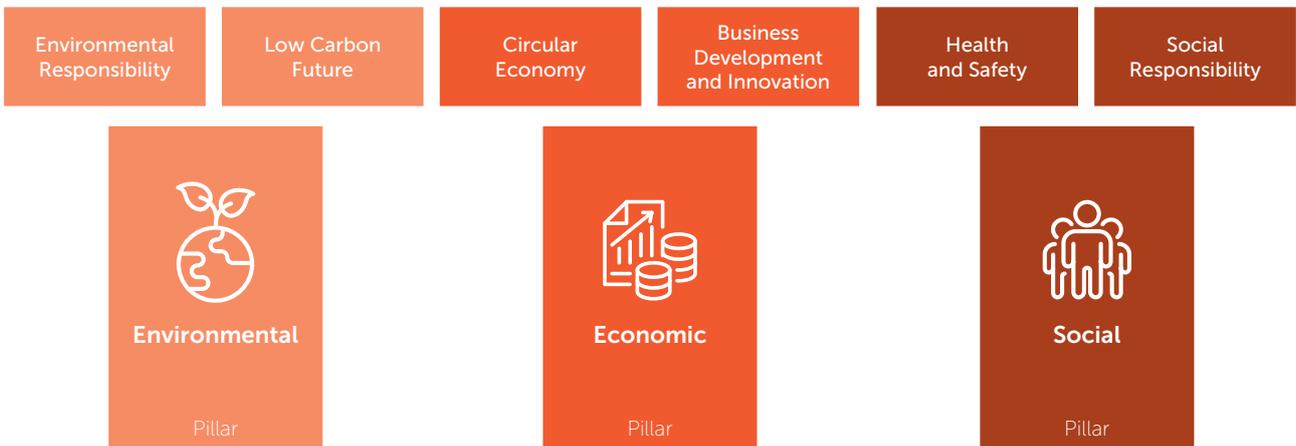


Our second sustainability report provides an opportunity to demonstrate how sustainability is an integral part of our business. We manufacture a carbon-negative aggregate product (Manufactured LimeStone – M-LS) with exceptional sustainability credentials.

M-LS is composed of chemically transformed waste materials as well as recycled secondary construction materials. In use, M-LS replaces virgin aggregate and thereby safeguards natural resources. It is an excellent example of the 'circular economy' in action, with the added benefit the waste treatment process permanently sequesters carbon dioxide.

Although sustainability has always been part of our business ethos, we have developed a sustainability strategy to enable clearer focus and communication of its importance. Our Sustainability Policy encompasses the three pillars of sustainability: environmental, social and economic. Within this framework we have identified six key themes to structure our ongoing sustainability action plans and reporting.

These are:



This report includes verified baseline performance in key performance indicators set across these themes, together with targets for ongoing improvement. Many of these areas have been included in existing work programmes and progress over the last twelve months will be detailed in the following sections. To strengthen our sustainability profile, we have achieved an excellent rating for Responsible Sourcing Certification (BES6001) and have developed an Environmental Product Declaration for M-LS.

We have three operational plants and offices in the UK, located at Brandon, Avonmouth and Leeds. This report covers our activities at all three plants and is in respect of our 2020 / 2021 financial year from 1 October 2020 to 30 September 2021. This period is referred to as 'this year' in the report. References to 'next year' mean the period 1 October 2021 to 30 September 2022. Our reporting metrics are by reference to the total tonnes of aggregate produced in the year, calculated from opening and closing stocks and sales.

Steve Greig – Managing Director



Objective:

Protect, develop, and secure the business by exemplary compliance, continual improvement, and innovation

Business Development

Our business continued to grow this year with an increase in our customer base and further recruitment in our aggregate sales team. APCr inputs have increased year on year with aggregate production exceeding 350,000 tonnes, an increase of almost 13% compared to last year. We began the expansion of our Leeds site to increase its production by 50% and the relocation of our Brandon plant to a bigger site is underway. The projects with partners in Japan, Australia and Europe have also progressed well.

Development of our new IT system across all business functions began, and the first module was completed. The project continues into next year, with development of a new sales/finance system. This will enable effective data collation, retrieval and reporting systems that will support business development.

Management Systems

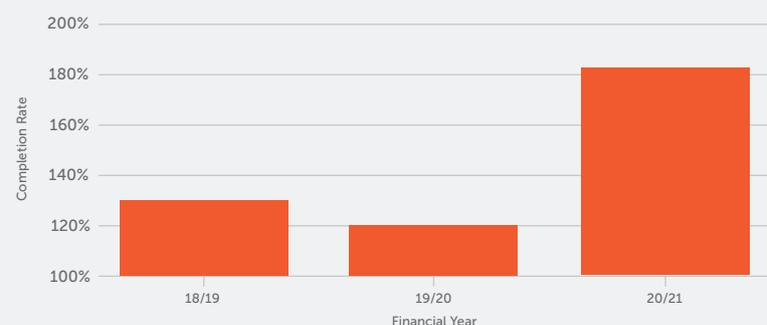
Throughout the year the business operated a PAS 99 management system certified to ISO 9001 and ISO 14001; the certificates from ISOQAR are available on the web site (<https://oco.co.uk/about-us/>). We also successfully transitioned from OHSAS 18001 to ISO 45001 in December 2020.

Quality control of our product is a priority for the business; we have laboratories and dedicated quality control technicians at each site to test both the input raw materials and the exported finished product.

The local laboratories are supported by the central laboratory at Avonmouth, where high level testing is undertaken as well as a significant program of research & development. O.C.O have invested over £200,000 in new laboratory equipment.

Our aggregate product is tested against BS standards for density and grading and in accordance with our End of Waste specification for leaching and strength. The number of tests we carry out exceed those required (see *Figure No.1*). This year the number of non-conformances per 1000 tonnes aggregate was 0.68 (see *Figure No.2*). This is an increase compared to last year, but the number of tests carried out was also increased from 120% to 183% to maintain product quality.

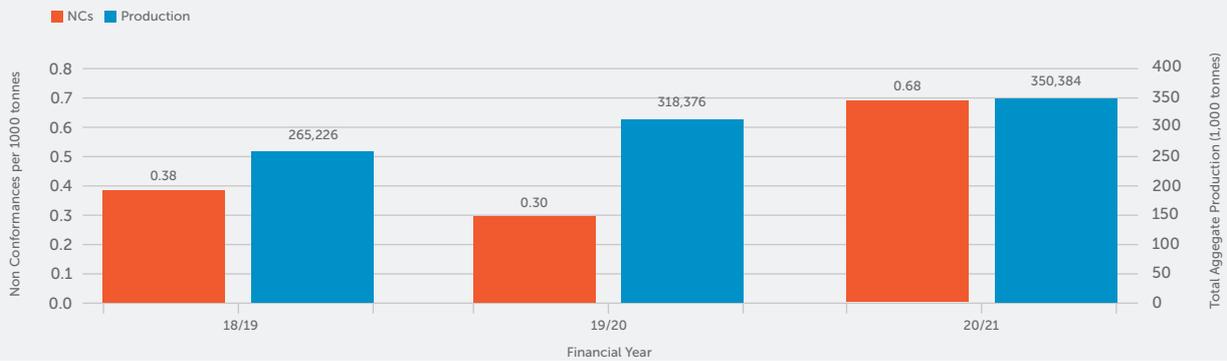
Figure No.1 Aggregate tests completed compared to number of tests required



Business Development and Innovation



Figure No.2 Non-conformances and Aggregate Production



Innovation and R&D

Our business is built around the innovative ACT process that allows residual materials to be treated to create carbon negative materials. A three-year Research & Development plan was approved by the Board in 2019/20. Work has begun to build a new R&D laboratory at Avonmouth. The plan focuses on process enhancements, product development and QMS/QA improvement.

O.C.O have entered in several collaborations to develop the use of our M-LS aggregate to create low carbon asphalts and concretes.

International development has continued, with significant progress made with Mitsubishi Corporation, and the public announcement of long standing projects with Kobelco Eco Solutions and Repsol. O.C.O began a new project in conjunction with an Australian company to build a new ACT facility.

R&D spend has increased every year for the last three financial years and will continue to be monitored and reported annually see *Figure No.3* below.

Collaborative arrangements undertaken this year were:

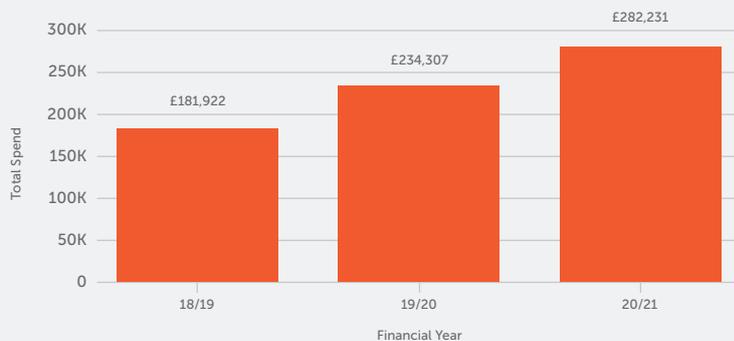
Kobelco Eco Solutions - flue gas pilot plant

Mitsubishi Corporation - carbon credits research collaboration

Repsol S.A - development of carbon capture facility

Confidential – collaboration with an Australian EfW facility

Figure No.3 Total R&D Spend





Transport

Objective:

Responsible management of transport

We do not operate any freight transport vehicles ourselves. Haulage of raw materials into the business is mostly carried out by the material suppliers themselves together with Grundon Waste Management Ltd., who move APCr using their carbon neutral bulk powder tanker fleet. The haulage of outgoing product is split with approximately 70% being customer collect and 30% being arranged by O.C.O using third party hauliers.

To ensure that hauliers are following best practice in relation to safety, efficiency and environmental protection, hauliers are encouraged to be certified to FORS (the Freight Operator Recognition Scheme).

Current certification levels are :



We have also introduced a target to increase year on year the percentage of contracted outgoing haulage loaded to 90% or above of load capacity to minimise the transport impacts; this year 85.0% of loads met this target, which is slightly lower than the 86.5% achieved last year.

	Average truck capacity (tonnes)	90% capacity (tonnes)	No. loads 90% and above	Total no. loads	Percent above 90% capacity
Tipper 4-wheeler	10 tonnes	9	0	1	0.0%
Tipper 6-wheeler	16 tonnes	15.4	8	157	5.1%
Tipper 8-wheeler	19.5 tonnes	17.55	6102	7358	82.9%
Tipper artic	29.5 tonnes	26.55	6728	7595	88.6%
Total			11879	15111	85.0%

The average delivery load size was 23.13 tonnes and delivery distance 48.9 miles.

Employee business mileage has been monitored this year (averaging 194 miles per 1000 tonnes aggregate), although due to COVID-19 restrictions on travel, we do not consider that this mileage forms a realistic baseline for future targets which will seek reduction in miles travelled in non-electric cars. Monitoring will continue in 2021/22 to allow refinement of the target and action plan.



Resource Use – Efficient Use of Constituent Materials

Objective:

Protect natural resources by efficient use of constituent materials, maximising recovery, reuse and recycling

Over sixty nine percent of our M-LS aggregate constituent materials are recovered, recycled or by-product. By using these materials, we are safeguarding virgin materials for the future and avoiding the environmental impacts associated with their quarrying and production processes.

The APCr that comprises around 50% of our constituent material would almost certainly be sent to landfill if we did not recover it.

Work continues to increase the extent and range of recovered and recycled materials used in our production process. The amount of APCr processed and recovered exceeded budget.

The total amount of secondary materials used in the business was 69.4% which is a 4.5% increase compared to last year.

Waste Prevention and Waste Management

Objective:

Minimise waste and avoid landfill

We are a net user of waste with, as noted above, 69.4% of our process inputs comprising recovered, recycled and by-product materials.

Total office and manufacturing waste generated was 65.95 tonnes equating to 0.19kg per tonne of aggregate produced. Our target to recycle all of this waste was not achieved, with 97.6% of it being recycled and the remainder disposed of. However, this represents a significant improved compared to the baseline year.

To benchmark this data, the British Precast Association, of which O.C.O is a member, publishes data on factory waste generated by its members (Ref Sustainability Matters, 2020). For the 2019 reporting period, total factory waste was 19.71 kg/tonne of product, factory waste to landfill was 0.31kg/tonne of product.



Environmental Responsibility



Environmental Management

Objective:

Maintain exemplary environmental performance

We achieved our target of having no environmental complaints from neighbours or interventions from regulatory bodies this year, resulting in us maintaining our OPRA Band A classification from the Environment Agency at Brandon and Leeds and the Band B status at Avonmouth.

The database for recording environmental incidents was improved, together with staff training in its use. During the year, twenty incidents were reported internally, allowing investigation where necessary and corrective actions to be taken to avoid recurrence. The most common type of incident was minor emissions when tankers were discharging. All incidents were contained in the controlled permitted areas within the sites.

Water

Objective:

Minimise overall water consumption using captured water where practicable

Our biggest use of water is in the manufacturing process for which it is an essential ingredient. Some water is also used for dust suppression and in the offices at each site. We harvest rainwater at all three plants and are working to maximise the use of this and minimise the use of both mains water and abstracted borehole water.

Water plans have been prepared for all three sites this year enabling better understanding of flows, usage and any additional metering required.

Using estimates from flow rates, consumption of borehole and harvested water this year was 78.8 litres/tonne aggregate produced, which is a slight increase compared to last year at 77.6 litres/tonne.

Current overall water usage increased to 158 litres per tonne from 147 litres per tonne last year.

A target to reduce mains water consumption by 15 % by 2025 has been set.

Lifecycle Analysis

Objective:

Minimise lifecycle environmental impacts

An Environmental Product Declaration covering A1-A3 (cradle to gate) lifecycle assessment was created by British Precast and verified by Environdec in 2021 showing a carbon negative balance of -36.9 kilograms of equivalent CO₂ per tonne of aggregate produced.

Previously, the carbon balance had been calculated according to PAS2050, which yielded a value of -45.12 kilograms CO₂ per tonne of aggregate produced.

The decrease in the negativity is due in part to differences in the two methodologies and the inability to obtain EPDs for the raw materials that O.C.O uses (necessitating the use of generic conservative database values).



Objective:

Continuous Improvement to Health and Safety Performance

Lost time injuries **0**

1 Medical treatment cases

First Aid treatment cases **16**

TOTAL 17

It has been another unprecedented for O.C.O with the COVID-19 pandemic, which absorbed a lot of time and resources to enable our business to continue working safely. The health and safety of all involved with the business is a high priority and this year's experience with COVID-19 has demonstrated the importance of having everyone in the business engaged with our health and safety systems.

The total number of accidents this year was 17, the majority being first aid treatment cases. The accident frequency rate of 0.11 accidents per 1000 hours worked was considerably lower than the previous year at 0.29.

The Senior Leadership Team continued to promote visible felt leadership by carrying out safety observations; improvements were made to the safety observation procedure including the creation of a new database enabling observations to be recorded effectively and efficiently. In total, 35 observations were carried out which fell short of the target of 72; this was largely due to travel restrictions imposed by COVID-19.

IOSH Managing Safely has now been undertaken and completed by over 30 employees, to encourage awareness and engagement in health and safety issues.

Last year, improvements were made to the reporting procedure and database for hazards and incidents. Definitions, reporting instructions and action requirements were all clarified and scene capture and root cause analysis procedures were introduced. All employees received training in the procedures and the result has been much improved reporting during the year.

This year, O.C.O invested in a new IT H&S module using Microsoft Dynamics. The new system allows much quicker collation and reporting of data, and provided better methods of assigning and tracking corrective actions.

Throughout the year it was also apparent that as more hazards were identified, the number of incidents decreased see *Figures No.4 and No.5*.

Figure No.4 Number of Hazards Identified



Figure No.5 Number of Reported Incidents





Objective:

Maximise carbon capture and minimise CO₂ emissions from raw materials and energy

Just under thirteen thousand tonnes (12,931 tonnes) of CO₂ were captured in our aggregate this year, as calculated by using the EPD validated carbon footprint of -36.90 kilograms CO₂ per tonne of aggregate produced and our production of 350,384 tonnes aggregate.

The breakdown of the carbon footprint is shown in *Figure No.6* below, using data for the current reporting period.

Figure No.6 Carbon Footprint Summary

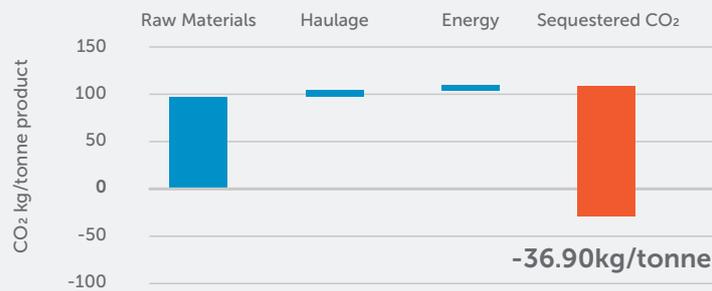
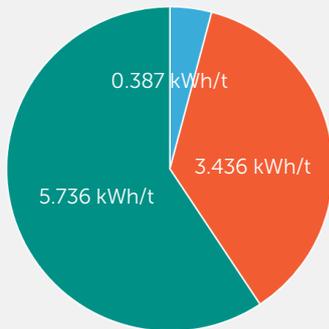
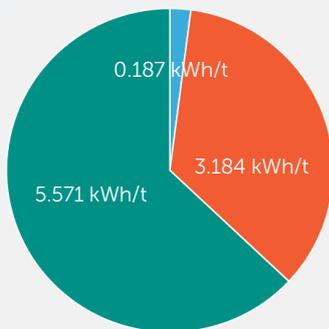


Figure No.7 Analysis of energy consumption across all three plants

2020/21



2019/20



■ Electricity
■ Gas Oil
■ Gas



CO ₂ kg/tonne product	CO ₂ Produced				Sequestered CO ₂	CO ₂ Footprint
	Raw Materials	Haulage	Energy	Total		
	98.10	5.15	3.13	106.38	-143.28	-36.90

Raw materials are the main source of embedded CO₂ with the greatest intensity coming from the relatively small amount of cement that is used. Cementitious alternatives with a lower embodied CO₂ have been trialled.

The haulage CO₂ is largely a function of haul distances – wherever possible we minimise the haulage of incoming raw materials by using suppliers who are closest to each of our sites. We apply the same principle to the distribution of our aggregate.

Though energy is a relatively small component of our CO₂ footprint, it is one that we manage and seek to minimise. Our main source of energy is electricity, primarily used for motors and compressors in the production process. Gas oil is our second largest energy source being used for loading shovels and the aggregate processing equipment. Gas is used for heating the offices at Leeds. *Figure No.7* shows the analysis of energy consumption.

Energy use is monitored and discussed in monthly team meetings. The sites have appointed individuals on each site as energy champions to seek encourage continual improvement. The company has a perpetual management target to reduce energy consumption, by continual investment in process improvements to increase efficiency.

The company is looking at alternative fuel sources such as HVO (hydrotreated vegetable oil), and electric site vehicles. Alternative energy sources including solar and wind power are being examined for potential installation on site.

Social Responsibility



Staff Engagement

Objective:
Staff to be positively engaged with the business

A survey was undertaken in 2021 to help understand the views of staff about the Company. The response rate was 91% and valuable feedback was gained, identifying strengths and some areas for improvement. The final questions provided a summary section as below and gave a positive overall average score of 8.49.

Statement	19/20	20/21
I am proud to work at O.C.O	7.81	8.47
I plan to still be working here in a years' time	7.94	8.65
I would recommend O.C.O to a friend	7.23	8.29
Overall O.C.O is a great place to work	7.23	8.49

1 POOR – 10 HIGH SATISFACTION

Targets have been set to improve both the participation rate and satisfaction scores in future years. A separate survey was also carried out in the summer of 2021 relating to the Health and Safety culture in the business, to help understand views held across the business and to strengthen engagement. We have carried out a review of levels of staff turnover this year and feel that current levels are acceptable; we will continue to monitor data and if numbers increase significantly, will revisit, and develop an action plan.

Employment and Skills

Objective:
Training programmes that equip staff to excel in their role and develop their full potential

Training requirements for each role are identified on a matrix that sits within the IMS – this records what training is needed, by who and by when and also records the date of completion. 1,681 training sessions were completed this year including both internal and external provision. Particular areas of focus, in addition to regular training needs, were training in the reporting of hazards and incidents for all employees and the completion and recording of safety observations for the Senior Leadership Team. Two site managers undertook WAMITAB training, and the loading shovel drivers carried out ITTSAR training.

When asked about skills and development in the employee engagement questionnaire, all respondents agreed to some extent (i.e., 'slightly' to 'strongly') that they had the skills to do their job well. When asked if they received sufficient training to be competent in their role, 88% of respondents agreed that to some extent they had, an increase from 81% last year.

Some areas of required training, such as first aid refresher training, had to be postponed due to COVID-19 restrictions. We hope that these postponed courses will be completed next year; we have also established a link with Mentor Training to deliver additional courses.

Equality and Diversity are to be advanced in all business activities. No individual will be unjustifiably discriminated against, including on the basis of gender, race, nationality, ethnic or national origin, religious or political beliefs, disability, marital status, social background, family circumstance, sexual orientation, gender reassignment, spent criminal convictions or age.

Social Responsibility



Local Community

Objective:

Achieve stronger connections with external communities

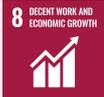


We operate a system to record and act upon any complaints from the local community; this year, no complaints were received.

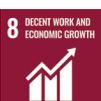
Feedback forms are provided to site visitors and these are stored on SharePoint – the average summary score from the 17 recorded site visits this year was 9.4 (on a scale of 1 – 10, with 10 being the highest level of positive feedback).

External communications have been maintained this year; news stories have been routinely posted on the O.C.O website to improve communication with external stakeholders and several of these stories have been re-published externally. The business is also developing a social media strategy.

A target was set last year for each site and head office to hold at least one community engagement activity; however, these were not able to take place due to COVID-19 restrictions.

Theme	UN Goals	Action area	Key Performance indicator	Baseline Performance (2019/20 Financial Year)	2020/21 Financial Year Performance
Business Development and Innovation	 	Management Systems	Maintain certification at all sites in ISO 45001, ISO9001, and ISO14001	All sites certified	All sites certified
			Maintain a Product Quality (PQ) rate of fewer than 0.5 non-conformancies per 1000 tonne	PQ rate of 0.30	PQ rate of 0.68
		Innovation	Increase total R&D spend year on year and report on non-confidential collaborative relationships	£282,231 with four collaborative relationships	£374,742 with five collaborative relationships
		Transport	Increase year on year the percentage of contracted outgoing haulage to be loaded to 90% or above of load capacity	86.5% were loaded to 90% and above load capacity	85.0% were loaded to 90% and above load capacity
			Increase year on year the percentage of contracted hauliers certified to FORS	76% hauliers are FORS certified	76% hauliers are FORS certified
Establish one year's data of car business miles driven using non electric vehicles post COVID as baseline. Then seek to reduce	257 miles per 1000 tonnes aggregate during a COVID year	195 miles per 1000 tonnes aggregate during a COVID year			
Circular Economy	 	Resource use	Increase raw input material that is recovered, recycled or by-product in 20/21	65.3% raw input material has been recovered, recycled or is a by-product	69.4% raw input material has been recovered, recycled or is a by-product
		Waste Prevention and waste management	100 per cent of office and manufacturing waste to be recycled or recovered	7.3% office and manufacturing waste was recycled or recovered	97.6% office and manufacturing waste was recycled or recovered
			Increase hazardous waste diverted from landfill by O.C.O recovery process	131,261 tonnes	143,058 tonnes (increase of 9%)
Environmental Responsibility	 	Environmental management	Achieve and maintain OPRA Band A at all Permitted facilities	OPRA Band A maintained at Brandon and Leeds, and Avonmouth at band B	OPRA Band A maintained at Brandon and Leeds, and Avonmouth at band B
			20% reduction in internally reported environmental incident rate in 20/21	0.058 incidents per 1000 tonnes aggregate	0.057 incidents per 1000 tonnes aggregate (2% reduction)
			Zero environmental complaints and regulatory interventions	Zero	Zero
		Water abstraction	Reduce mains water consumption	69.45 m ³ per 1000 tonnes aggregate	80.30 m ³ per 1000 tonnes aggregate
			Establish two years data of abstracted water volume to provide baseline. Install meter at Leeds in 20/21	Data review commenced	In progress
			Establish two years data of total water volume drawn to provide baseline	Data review commenced	In progress
Life-cycle assessment	Achieve EPD in year 2020/21 and maintain	EPD preparation underway	EPD complete and valid for 5 years		
Health and Safety		H&S management	Zero Lost Time Injuries (LTIs)	2 lost time injuries	Zero lost time injuries
			Reduce Accident Frequency Rate (including LTI's, Medical Treatment, First Aid) year on year	0.29 accidents per 1000 hours worked	0.11 accidents per 1000 hours worked
			Six safety observations per member Senior Leadership team in year 20/21	61 safety observations in total by 13 staff	35 safety observations in total by 13 staff
Low Carbon Future		Greenhouse gas emissions	Reduce CO ₂ emissions from energy used in manufacture and offices (including electricity, diesel and gas)	2.28 tonnes per 1000 tonnes aggregate	2.20 tonnes per 1000 tonnes aggregate
		Energy management	Achieve year on year increased carbon capture in net CO ₂ balance (using latest carbon footprint of -36.9 kg per tonne aggregate derived from EPD)	11462 tonnes of carbon were captured by production of aggregate	12931 tonnes of carbon were captured by production of aggregate
Social responsibility	   	Employment and skills	Report number of training sessions completed per year and develop record system to include hours spent training in 20/21	1625 training sessions	1681 training sessions
			Improve staff engagement survey response rate	56% response rate	91% response rate
			Achieve year on year improvement in staff engagement survey - average response score in summary questions (10 = maximum positive score)	Score 7.55	Score 8.48
		Local communities	One community engagement project for each site & head office	12 month partnership established with Trees for Cities, including tree funding contribution	COVID restrictions prevented planned community activities

United Nations Sustainable Development Goals

	GOAL 1: NO POVERTY	Economic growth must be inclusive to provide sustainable jobs and promote equality.
	GOAL 3: GOOD HEALTH AND WELL-BEING	Ensuring healthy lives and promoting the well-being for all at all ages is essential to sustainable development.
	GOAL 4: QUALITY EDUCATION	Obtaining a quality education is the foundation to improving people's lives and sustainable development.
	GOAL 5: GENDER EQUALITY	Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world.
	GOAL 6: CLEAN WATER AND SANITATION	Clean, accessible water for all is an essential part of the world we want to live in.
	GOAL 8: DECENT WORK AND ECONOMIC GROWTH	Sustainable economic growth will require societies to create the conditions that allow people to have quality jobs.
	GOAL 9: INDUSTRY, INNOVATION, AND INFRASTRUCTURE	Investments in infrastructure are crucial to achieving sustainable development.
	GOAL 10: REDUCED INEQUALITIES	To reduce inequalities, policies should be universal in principle, paying attention to the needs of disadvantaged and marginalized populations.
	GOAL 11: SUSTAINABLE CITIES AND COMMUNITIES	There needs to be a future in which cities provide opportunities for all, with access to basic services, energy, housing, transportation and more.
	GOAL 12: RESPONSIBLE CONSUMPTION AND PRODUCTION	Ensure sustainable consumption and production patterns
	GOAL 13: CLIMATE ACTION	Climate change is a global challenge that affects everyone, everywhere.
	GOAL 15: LIFE ON LAND	Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.