







SUSTAINABILITY REPORT 2021–2022





Executive Summary

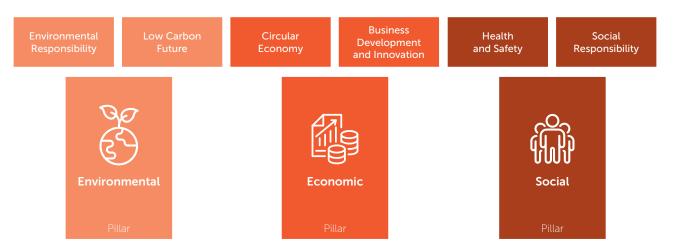
SUSTAINABLE G ALS

Our third sustainability report provides an opportunity to demonstrate how sustainability is an integral part of our business. We manufacture a carbon-neutral* 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 that 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. We have maintained an excellent rating for Responsible Sourcing Certification (BES6001) and have revised our Environmental Product Declaration for M-LS, substantially improving its global warming potential value.

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 2021 / 2022 financial year from 1 October 2021 to 30 September 2022. This period is referred to as 'this year' in the report. References to 'next year' mean the period 1 October 2022 to 30 September 2023. 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

*The carbon storage associated with the M-LS product is managed in Puro Registry for carbon removal credits and is only available by separate negotiation with O.C.O



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 370,000 tonnes, an increase of over 5% compared to last year. We completed 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 continued with the installation of a new weighbridge and sales system. The project continues into next year, with development of paperless systems and automated reports.

Management Systems

Throughout the year the business operated a PAS 99 management system certified to ISO 9001, ISO 14001, and ISO 45001; the certificates from ISOQAR are available on the web site (https://oco.co.uk/about-us/).

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 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 ϑ Development.

Our aggregate product is tested against BS standards and in accordance with our End of Waste specification. 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 1.14 (see *Figure No.2*). This is an increase compared to last year, but the number of tests carried out was also increased from 183% to 240% to maintain product quality.

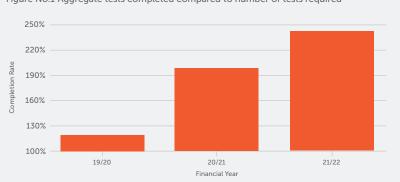
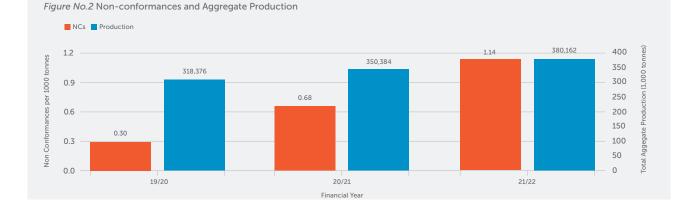


Figure No.1 Aggregate tests completed compared to number of tests required



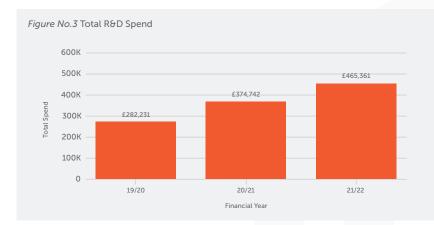
Innovation and R&D

Our business is built around the innovative process that allows waste materials to be treated to create carbon negative materials. A three-year Research & Development plan was approved by the Board in 2020. 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, Kobelco Eco Solutions and Repsol. O.C.O publicly announced a new project in conjunction with the consortium in charge of building the Maryvale EfW in Victoria, Australia, to build a carbonation 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.



Kobelco Eco Solutions - new plant development

Mitsubishi Corporation - carbon credits research collaboration

Repsol S.A development of carbon capture facility

Collaboration with Maryvale EfW facility

Transport

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 waste using their carbon neutral bulk powder tanker fleet.

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). Currently, 80% of hauliers are certified; an increase of 4% compared to the previous year:



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 83.6% of loads met this target, which is slightly lower than the 85.0% achieved last year. The average delivery distance was reduced slightly from 48.9 miles last year to 47.7 miles this 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	2	21	9.5%
Tipper 6-wheeler	16 tonnes	15.4	104	237	43.9%
Tipper 8-wheeler	19.5 tonnes	17.55	5181	6444	80.4%
Tipper artic	29.5 tonnes	26.55	7775	8916	87.2%
Total			13062	1 5618	8 3.6 %

Employee business mileage has been monitored this year (averaging 319 miles per 1000 tonnes aggregate). This mileage should form a realistic baseline for future targets.

O.C.O has invested in a number of electric vehicles, which now accounts for over 34% of the total business mileage.

The company has maintained the working from home policy and makes extensive use of video conferencing to reduce travelling for meetings.



Resource Use – Efficient Use of Constituent Materials

Protect natural resources by efficient use of constituent materials, maximising recovery, reuse and recycling Over fifty five 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 recycle it.

The business recycled over 163 thousand tonnes of APCr, which is almost a 14% increase over the previous year.

Work continues to increase the extent and range of recovered and recycled materials used in our production process. The company now uses lower carbon cements (CEMII) as well as carbon dioxide from a biogenic source at all three sites.

Waste Prevention and Waste Management

Minimise waste and avoid landfill

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

Total office and manufacturing waste generated was 246.81 tonnes equating to 0.65kg per tonne of aggregate produced. Our target to recycle all of this waste was not achieved, with 28.0% of it being recycled and the remainder disposed of.

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). In the most recent figures for 2019, total factory waste was 19.71 kg/tonne of product. O.C.O is currently producing 96.7% less waste than the industry average.





Environmental Management

Maintain exemplary environmental performance O.C.O was highly commended in the Dilmun International Environmental Award (sponsored by GPIC) for demonstrating excellence in environmental management.

We achieved our target of having no environmental complaints from neighbours or interventions from regulatory bodies this year. All sites hold the highest Compliance Band A classification from the Environment Agency.

During the year, twenty-five incidents were reported internally, allowing investigation where necessary and corrective actions to be taken to avoid recurrence. This is a slight increase compared to the previous year, and the overall environmental incident rate increased from 0.05 per 1000 tonnes of product manufactured to 0.07. The most common type of incident was minor emissions from tankers discharging. All incidents were contained in the controlled permitted areas within the sites.

Water

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 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 84.7 litres/tonne aggregate produced, which is a slight increase compared to last year at 78.8 litres/tonne.

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

Lifecycle Analysis

Minimise lifecycle environmental impacts Our Environmental Product Declaration covering A1-A3 (cradle to gate) was revised and reverified by EPD Hub in 2022 showing a carbon balance of -49.1 kilograms of equivalent CO₂ per tonne of aggregate produced. Previously, this had been calculated as -36.9 kilograms CO₂ per tonne of aggregate produced.

Further improvement is expected due to increasing use of low carbon raw materials and renewable energy.

O.C.O has now been audited and fully onboarded onto the Puro Earth carbon trading platform. Major corporations including Microsoft have purchased significant numbers of carbon credits from O.C.O.



Continuous Improvement to Health and Safety Performance



treatment cases

TOTAL 25

The health and safety of all involved with the business is a high priority as well as the importance of having everyone in the business engaged with our health and safety systems.

The total number of accidents this year was 23, the majority being first aid treatment cases. The accident frequency rate of 0.16 accidents per 1000 hours worked, which is slightly higher than the previous year at 0.11, but significantly below the baseline year at 0.29.

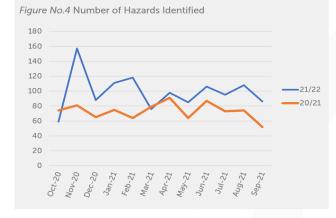
The Senior Leadership Team continued to promote visible felt leadership by carrying out safety observations; improvements were made to the safety observation procedure including the creation of a new database enabling observations to be recorded effectively and efficiently. In total, 65 observations were carried out which fell short of the target of 87, but a significant improvement on the previous year at 35.

IOSH Managing Safely is a standard training requirement for all line managers, with site management staff encouraged to complete a NEBOSH certificate. All staff are required to complete the IOSH Working Safely course 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.

The number of hazards identified increased compared to the previous year, which is reflected in the low accident frequency rate compared to the previous year (see Figures No.4 and No.5).

O.C.O was the proud recipient of the gold award from the Royal Society for the Prevention of Accidents (RoSPA).





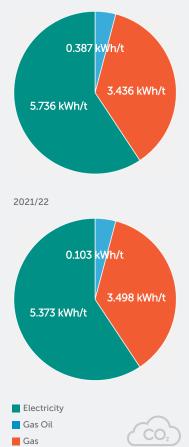




Maximise carbon capture and minimise CO₂ emissions from raw materials and energy

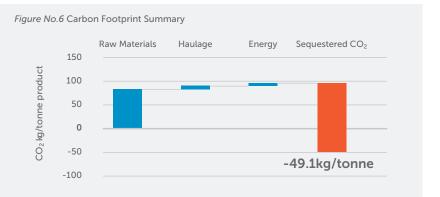
Figure No.7 Analysis of energy consumption across all three plants

2020/21



Just over eighteen thousand tonnes (18,156 tonnes) of CO₂ were captured in our aggregate this year, as calculated by using the EPD validated carbon footprint of -49.1 kilograms CO₂ per tonne of aggregate produced and our production of 370,037 tonnes aggregate.

The breakdown of the carbon footprint is shown in Figure No.6 below.



	CO₂ Produced			Sequestered			
	Raw Materials	Haulage	Energy	Total	CO ₂	CO ₂ Footprint	
CO₂ kg/ tonne product	85.60 (-12.50)	6.58 (+1.43)	2.77 (-0.35)	94.95 (-11.42)	144.02 (+0.74)	-49.10	

Raw materials are the main source of embedded CO_2 with the greatest intensity coming from the relatively small amount of cement that is used. Low clinker cements are now being used at all three sites

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 CO_2 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 to encourage continual improvement. The company has a perpetual management target to reduce energy consumption, by continual investment in process improvements to increase efficiency. Overall, energy consumption was reduced by over 28% from 12.578MWh to 8.978MWh.

Alternative energy sources including solar and wind power are being examined for potential installation on site.



Staff Engagement

Staff to be positively engaged with the business A survey was undertaken in 2022 to help understand the views of staff about the Company. The response rate was 98% 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 8.17.

	19/20	20/21	21/22
I am proud to work at O.C.O	7.81	8.47	8.26
I plan to be working here in a years	7.94	8.65	8.45
I would recommend O.C.O to a friend	7.23	8.29	7.98
Overall O.C.O is a great place to work	7.23	8.49	8.17

1 LOW - 10 HIGH

In general, scores have been maintained compared to last year. Targets have been set to improve both the participation rate and satisfaction scores in future years. The company also continues to have regular health and safety surveys to ensure employee views are captured. 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 this.

Employment and Skills

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. 1,773 training hours 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.

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.

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.



Local Community

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 22 completed questionnaires was 9.9 (on a scale of 1 - 10, with 10 being the highest level of positive feedback). This is an improvement over the previous year, when 18 responses gave an average score of 9.2.

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.

O.C.O have continued to support the local communities. In 2021, O.C.O provided the funding necessary to save and maintain publication of the local parish newsletter at their new Larkshall Mill site near Wretham in Norfolk.

Theme	UN Goals	Action area	Key Performance indicator	Baseline Performance (2019/20 Financial Year)	2020/21 Financial Year Performance
8 DECENT WORK AND COMMUNE CANVITH		Management	Maintain certification at all sites in ISO 45001, ISO9001, and ISO14001	All sites certified	All sites certified
	8 DECENT WORK AND ECONOMIC GROWTH	Systems	Maintain a Product Quality (PQ) rate of fewer than 0.5 non-conformancies per 1000 tonne	PQ rate of 0.68	PQ rate of 1.14
Business	1	Innovation	Increase total R&D spend year on year and report on non-confidential collaborative relationships	£374,742 with five collaborative relationships	£465,361 with over ten collaborative relationships
Development and Innovation	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE		Increase year on year the percentage of contracted outgoing haulage to be loaded to 90% or above of load capacity	85.0% were loaded to 90% and above load capacity	83.6% were loaded to 90% and above load capacity
		Transport	Increase year on year the percentage of contracted hauliers certified to FORS	76% hauliers are FORS certified	80% 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	195 miles per 1000 tonnes aggregate during a COVID year	319 miles per 1000 tonnes aggregate
		Resource use	Increase raw input material that is recovered, recycled or by-product in 20/21	69.4% raw input material has been recovered, recycled or is a by-product	55.9% raw input material has been recovered, recycled or is a by-product
Circular Economy 12	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Waste Prevention and waste	100 per cent of office and manufacturing waste to be recycled or recovered	97.6% office and manufacturing waste was recycled or recovered	28.0% office and manufacturing waste was recycled or recovered
	CO	management	Increase hazardous waste diverted from landfill by O.C.O recovery process	143,058 tonnes	163,552 tonnes (increase of 14%)
			Achieve and maintain OPRA Band A at all Permitted facilities	OPRA Band A maintained at Brandon and Leeds, and Avonmouth at band B	Compliance Band A at all sites
	C CLEAN WATER	Environmental management	Reduction in internally reported environmental incident rate in 20/21	0.05 incidents per 1000 tonnes aggregate	0.07 incidents per 1000 tonnes aggregate
	6 CLEAN WATER AND SANITATION		Zero environmental complaints and regulatory interventions	Zero	Zero
Environmental Responsibility	15 UFE ON LAND		Reduce mains water consumption	80.30 m ³ per 1000 tonnes aggregate	84.69m³ per 1000 tonnes aggregate
		Water abstraction	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 verified and published	EPD revised and reverified
	3 GOOD HEALTH AND WELL-BEING	HH HENG H&S management	Zero Lost Time Injuries (LTIs)	Zero lost time injuries	One lost time injury
Health and Safety			Reduce Accident Frequency Rate (including LTI's, Medical Treatment, First Aid) year on year	0.11 accidents per 1000 hours worked	0.16 accidents per 1000 hours worked
			Six safety observations per member Senior Leadership team in year 20/21	35 safety observations in total by 13 staff	65 safety observations in total by 13 staff
		Greenhouse	Reduce CO ₂ emissions from energy used in manufacture and offices (including electricity, diesel and gas)	2.20 tonnes per 1000 tonnes aggregate	2.09 tonnes per 1000 tonnes aggregate
Low Carbon Future	13 GLIMATE	gas emissions	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)	12,931 tonnes of carbon were captured by production of aggregate	18,156 tonnes of carbon were captured by production of aggregate
		Energy management	Reduce total energy used in controlled operations	12.58 MWh per 1000 tonnes aggregate	8.98 MWh per 1000 tonnes aggregate
Social	1 [№] ¶¥ †††	Employment and skills	Report number of training sessions completed per year and develop record system to include hours spent training in 20/21	1681 training hours	1773 training hours
	4 duality 1 duality 5 duality Calledon and a second an		Improve staff engagement survey response rate	91% response rate	98% response rate
			Achieve year on year improvement in staff engagement survey - average response score in summary questions (10 = maximum positive score)	Score 8.48	Score 8.17
	10 REDUCED INEQUALITIES	Local communities	One community engagement project for each site & head office	COVID restrictions prevented planned community activities	Funding for community newsletter

United Nations Sustainable Development Goals

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

