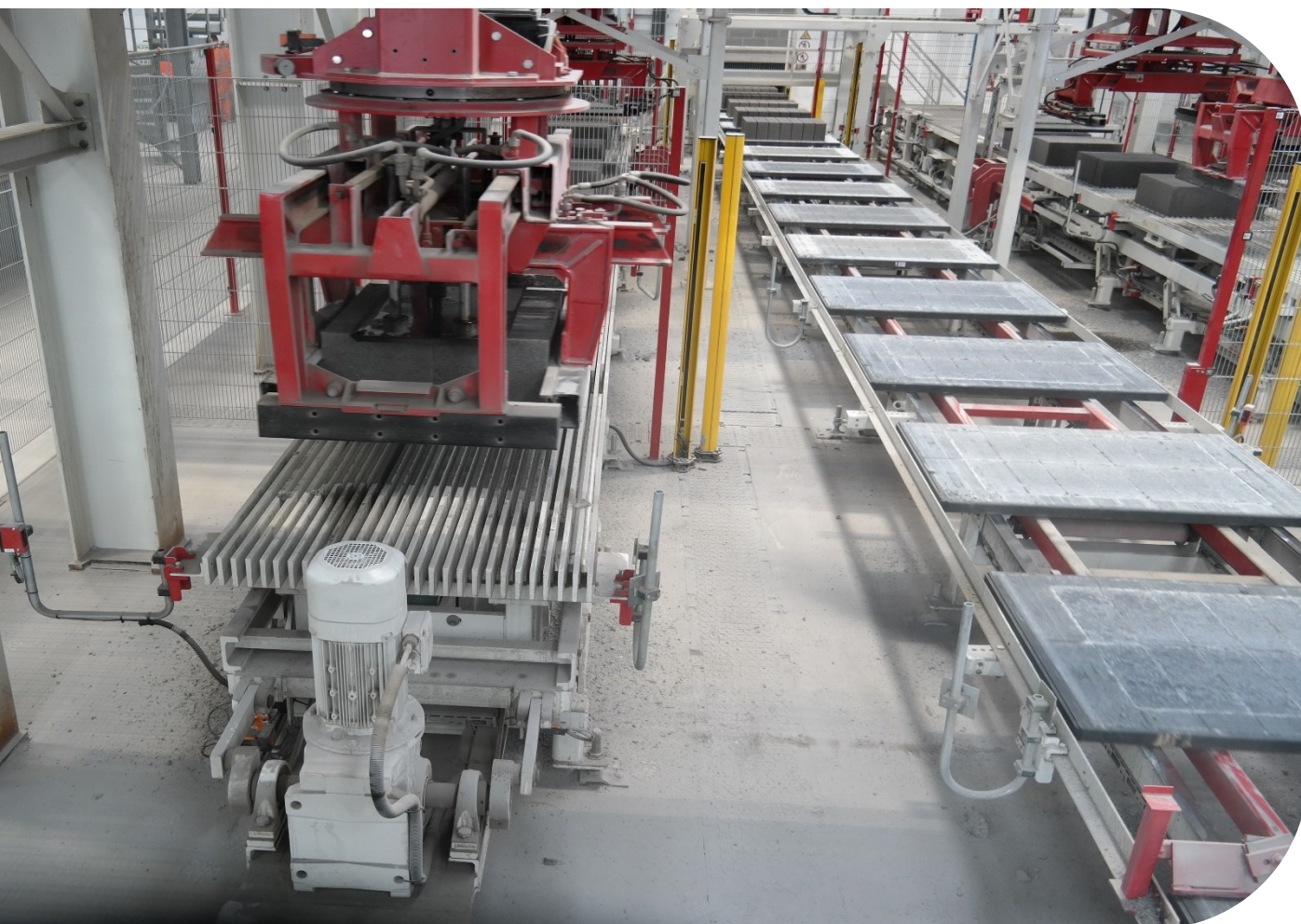




**THOMAS ARMSTRONG  
(CONCRETE BLOCKS)  
LIMITED**



# Sustainability Performance Report

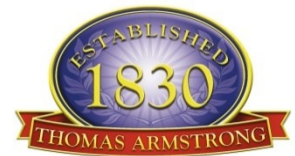
10<sup>th</sup> Report – 2024 Data

# Sustainability Report 2023

**This is our ninth annual Sustainability Report based on verified data for Jan – Dec 2023. This report intends to communicate what we are doing to reduce our carbon footprint and to help engage with the communities and other stakeholders affected by our operations. Furthermore, we publish our independently verified Key Performance Indicators (KPI's) in order to compare ourselves with the rest of our industry as well as giving us a basis for setting new objectives and targets for the coming years as we continually improve as a company.**

## A sustainable company

We can trace our history back to 1830 and throughout these last 194 years we have demonstrated a continual will to expand, move with the times and improve our operations. We have always employed locally, served and supported local communities and remain one of the UK's largest and long-established independent construction sector companies. Sustainability and thinking long-term is in our DNA as an organisation.



## Our impact on the environment

We recognise that as we grow and expand our operations, the impact of these operations on the environment will increase. We are taking every possible step to monitor, measure and identify ways of mitigating these impacts and our footprint as a company. We have implemented a Carbon Reduction plan across our group as a means of achieving 2050 net zero carbon targets.

## Our commitment

As an organisation we have adopted rigorous policies and integrated management systems to not only help us meet but exceed our environmental and corporate duty of care. To this end we have adopted ISO 9001 Quality and ISO 14001 Environmental Management systems at our plants. These systems are integrated and have been updated to the very latest 2015 versions.

We continue to undergo rigorous independent verification audits of our sustainability credentials, management systems, control of suppliers, business ethics and greenhouse gas emissions.

In hold the prestigious and hard-won and respected certification 'BES 6001 Responsible Sourcing' and became the first block producer in the UK to be awarded the top rating of "Excellent" for our Airtec aerated operation.

This certification demonstrates our ongoing commitment to remaining a responsible producer, it gives us as a company invaluable data and guidance how we can make positive changes to our operations and contribute towards securing a healthy future for the masonry industry.



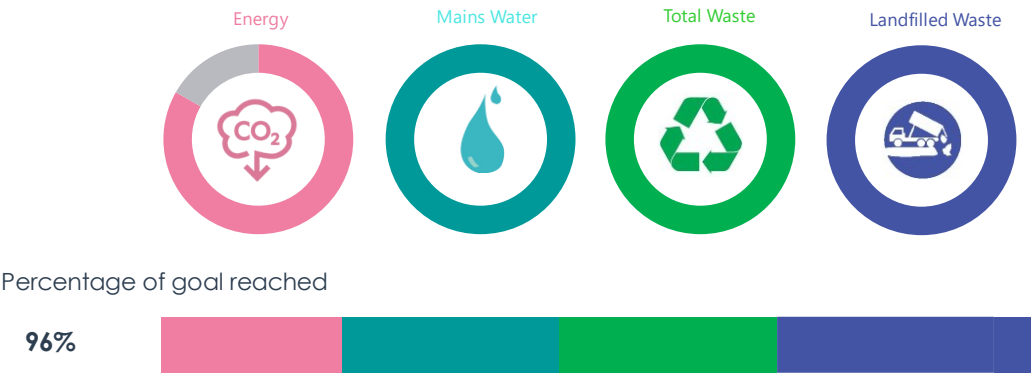
# Overall targets for 2030

We achieved the Mineral Products Association (MPA) sustainability targets for 2024 which were based on industry sector benchmarks set in 2012. We have now significantly tightened these targets for 2030 and are now aiming to achieve complete compliance with these.

## Our Key Goals

An overview of our overall performance to date against 2030 targets

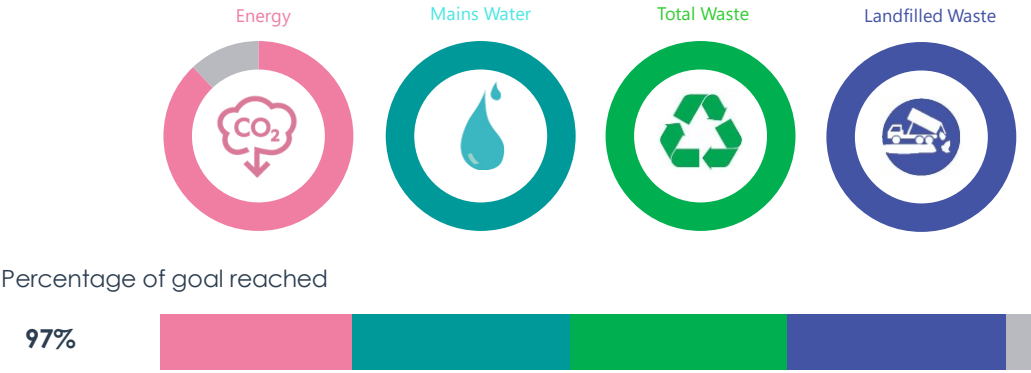
Airtec aerated	Total Energy <i>kWhrs / Tonne product</i>	Mains Water <i>Ltrs / Tonne product</i>	Total Waste <i>kg / tonne product</i>	Landfilled Waste <i>kg / tonne product</i>
2015 Benchmark	312.0	12.7	0.61	0.04
2024 Data	360.4	22.1	0.01	0.000
2025 Goal	Reduce by 15% on 2015 benchmark	Reduce by 30% on 2015 benchmark	Reduce by 80% on 2015 benchmark	Reduce by 90% on 2015 benchmark
Our 2030 Target	300.0	25.0	0.01	0.000
% of goal reached	83%	Target Achieved!	100%	Target Achieved!



## Our Key Goals

An overview of our overall performance to date against 2030 targets

Aggregate Blocks	Total Energy <i>kWhrs / Tonne product</i>	Mains Water <i>Ltrs / Tonne product</i>	Total Waste <i>kg / tonne product</i>	Landfilled Waste <i>kg / tonne product</i>
2015 Benchmark	9.0	57.0	0.68	0.02
2024 Data	9.1	1.3	0.02	0.00
2025 Goal	Reduce by 15% on 2015 benchmark	Reduce by 30% on 2015 benchmark	Reduce by 80% on 2015 benchmark	Reduce by 90% on 2015 benchmark
Our 2030 Target	8.0	1.0	0.10	0.000
% of goal reached	88%	Target Achieved!	Target Achieved!	Target Achieved!

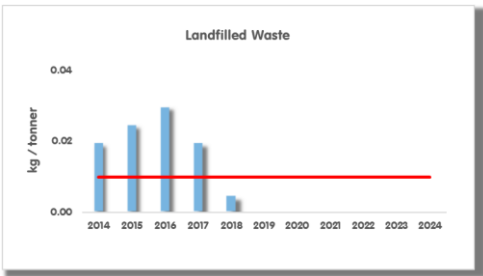


# Key Performance Indicators – group data

## Waste Management

The manufacture of concrete block products generates very little waste and no by-products. We have achieved zero waste to landfill at our plants.

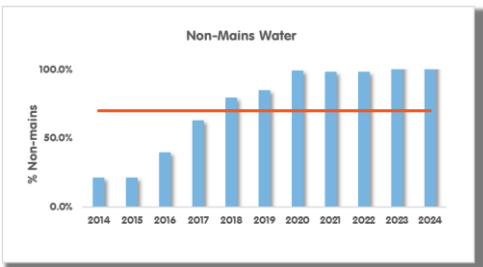
In 2024 we maintained zero waste to landfill.



## Water management

Concrete block production produces no effluent and nearly all process water is automatically consumed in the process. Any excess steam, in the case of Airtec production, is re-condensed and used back in the process. Our largest plants are now using predominantly non-mains water and we continue to reduce the use of mains water.

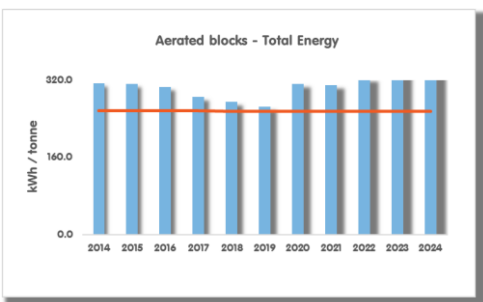
In 2024 our % use of borehole and recovered water achieved over 99% of all water used.



## Energy management

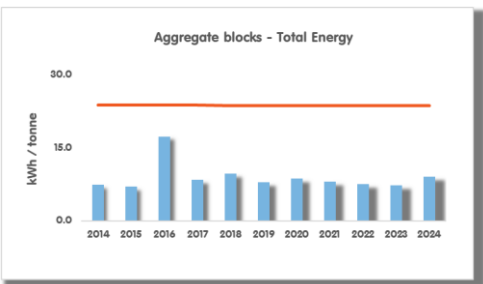
Where possible, we use natural curing for block production without the use of energy or fossil fuels. We continue an ongoing process of replacing equipment with energy-efficient technology. We continue to introduce renewable energy technologies at our plants.

The total energy in our aerated block manufacturing remained stable in 2024 although output was reduced. Aggregate block production remains well below industry benchmarks on energy intensity.



## Greenhouse gases

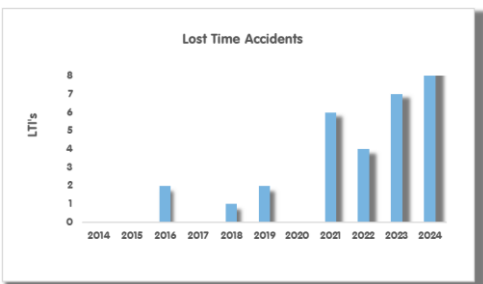
Detailed analysis of data including productivity and energy usage enables us to determine our greenhouse gas emissions; this data is independently verified. This data enables us to compare our figures with those of our industry sector benchmarks and allows us to generate targets for further reductions.



## Health & safety

We operate a health & safety management system throughout our group. It is our goal to extend the scope of our management systems to include certification to ISO 45001 by the end of 2028.

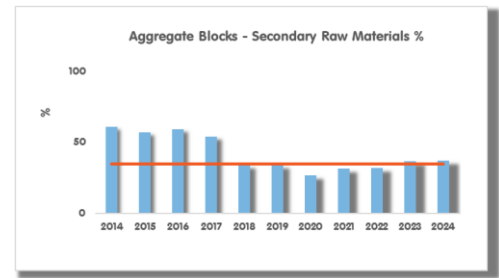
We had 8 x LTI's in 2024 and our target remains zero Lost Time Incidents.



## Raw materials

Raw materials are sourced as locally as possible to the manufacturing plant usually within a 30-mile radius. The quality, safety and environmental credentials of our suppliers are monitored and used in our assessment of potentially new suppliers. We maximise the use of secondary, recycled and reclaimed materials in our products which has clear environmental benefits from the reduction of quarried aggregates and is commercially sustainable.

**We have commissioned a lightweight aggregate facility which produces a high quality aggregate from 100% recycled raw material. We are beginning to use this in our block products and thereby greatly reducing our reliance on imported materials and virgin aggregates.**



*We are taking significant steps to utilise a higher % of alternative recycled, quality lightweight aggregates over the next 2 years.*

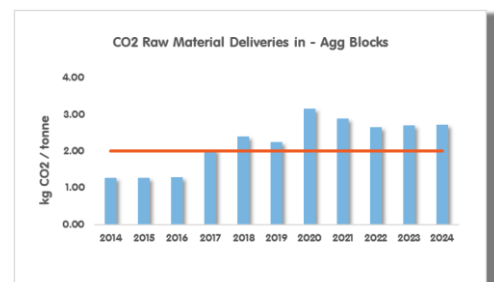
## Transportation – Incoming raw materials

We monitor and measure our carbon footprint for deliveries of raw material to our site. Our policy objective and target to mitigate the impact of our transportation is by maximising fuel efficiency by sourcing as locally to our manufacturing sites as possible.

### Raw materials in (2023 data):

Airtec blocks = 4.06 kgCO<sub>2</sub> / tonne

Aggregate Blocks = 2.73 kgCO<sub>2</sub> / tonne



*Reductions in kgCO<sub>2</sub> / tonne are expected to continue into next year*

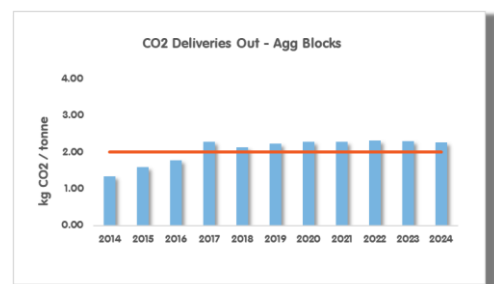
## Transportation – Outgoing finished product

We monitor and measure our carbon footprint for deliveries of finished product from our site. Our policy objective and target to mitigate the impact of our transportation is to maximise fuel efficiency by optimising vehicle carrying capacity, maintaining a regional customer base and replacing old vehicles with new every 4 years.

### Deliveries out (2023 data):

Airtec blocks = 5.56 kgCO<sub>2</sub> / tonne

Aggregate blocks = 2.26 kgCO<sub>2</sub> / tonne



*Maintaining better than target figures*

## Local communities

With nearly 200 years' worth of engaging local communities, we recognise the benefits of good relationships with our neighbours which is mutually beneficial. Wherever we have development plans at our sites we actively engage with local communities and keep them informed. Our preferred method of communication is face to face and via our employees most of whom are from the local community. At many of our sites we contribute to local events and fundraising activities.

## Environmental incidents and complaints

We record and analyse the number of environmental incidents and complaints across our sites. Regular inspections by local authorities ensure that all of our activities are in compliance to our pollution prevention permits which is reinforced by our stringent environmental management systems. Target is 0 incidents & complaints.

**In 2024 we had 0 environmental incidents or complaints.**





## AGGREGATE CONCRETE BLOCKS

Metric	Unit		2017 <sup>(1)</sup>	2018 <sup>(1)</sup>	2019 <sup>(1)</sup>	2020 <sup>(1)</sup>	2021 <sup>(1)</sup>	2022 <sup>(1)</sup>	2023 <sup>(1)</sup>	2024 Target	2024 <sup>(1)</sup>	Target Met?
Quality	Sites operating to ISO 9001 (%)	KPI	100	100	100	100	100	100	100	Maintain ISO systems	100	✓
		Industry Benchmark	66.7	89.8	91.3	92.7	92.7	89.7	81.3		78.3	
Water	Total mains water / tonne product (litres/tonne)	KPI	87	49.5	24.5	1.0	3.1	1.2	1.1	Reduce mains water usage to < 3 ltrs/tonne	1.3	✓
		Industry Benchmark	37.8	34.7	37.0	35.4	34.4	29.9	33.9		33.0	
	Non-mains water / tonne product (litres/tonne)	KPI	8.7	57	62.3	115.2	120.5	49.6	35.7	Maintain non-mains water to > benchmark	65.5	✓
		Industry Benchmark	14.7	19.6	18.1	52.4	31.5	29.1	24.3		27.5	
Energy	Total energy use per tonne of product (kWh/tonne)	KPI	8.4	9.6	7.9	8.6	8.0	7.5	7.3	Maintain low energy usage	9.1	✓
		Industry Benchmark	19.3	25.5	22.3	25.5	25.9	23.5	33.2		22.0	
CO <sub>2</sub>	Total CO <sub>2</sub> per tonne product (kgCO <sub>2</sub> /tonne)	KPI	2.68	2.68	2.09	2.17	1.94	1.73	0.89	Maintain low greenhouse gas generation	2.11	✓
		Industry Benchmark	4.96	5.84	5.1	5.08	5.03	4.71	6.44		7.86	
Packaging	Total packaging/tonne product (kg/tonne)	KPI	0.26	0.34	0.38	0.24	0.37	0.19	0.32	Continue to reduce packaging	0.23	✓
		Industry Benchmark	0.71	2.2	2.61	3.25	3.56	2.16	0.65		0.86	
Waste	Total waste/tonne product (kg/tonne)	KPI	0.46	0.07	0.05	0.05	0.99	0.02	0.01	Aim towards zero waste to landfill by 2025	0.1	✓
		Industry Benchmark	15.68	13.95	19.09	24.46	20.97	17.08	22.05		18.79	
	Waste to landfill (kg/tonne)	KPI	0.01	0	0	0	0	0	0		0	✓
		Industry Benchmark	0.17	0.09	0.06	0.33	0.03	1.34	0.35		0.14	
Secondary aggregate use (excl cement)	% Secondary aggregate use / recycled aggregate	KPI	54.3	34.4	34.1	26.9	35.6	40.6	36.7	Maintain higher % than sector, raise to > 30%	41.1	✓
		Industry Benchmark	21.3	16	13.8	10.4	10.3	9.5	8.4		8.2	
Environmental	Sites operating to ISO 14001 (%)	KPI	100	100	100	100	100	100	100	Maintain ISO systems	100	✓
		Industry Benchmark	85.1	91.9	94.4	96.7	98.1	96.9	90.4		89.1	
Responsible Sourcing	Sites operating to BES 6001 (%)	KPI	100	100	100	100	100	100	100	Maintain BES 6001	100	✓
		Industry Benchmark	58.8	77.6	75.8	79.0	80.5	79.5	66.7		73.9	
Health & Safety	Sites operating to ISO 45001 (%)	KPI	0	0	0	0	0	0	0	Gain ISO 45001 by 2025	0	✗
		Industry Benchmark	30.0	51.0	50.0	43.9	61.0	48.7	52.1		63.0	
Transport	Average delivery distance (km/delivery)	KPI	50.6	50	52.1	54	54.5	55	55.7	Maintain < than benchmark distances	55.0	✓
		Industry Benchmark	60	95	88	115	81	92	71		71	
	Average delivery lorryload (tonne/delivery)	KPI	28	26	22	22	22	22	23	Maintain figures in line with benchmarks	22	✓
		Industry Benchmark	25.0	24.4	23.1	23.9	20.0	23.2	23.6		23.1	
Training	Average time spent on training (hrs/employee/year)	KPI	9.2	2.3	9.2	2.3	5.6	3.7	21.6	Increase training hours to > 7 hours	5.2	✗
		Industry Benchmark	16.0	37.6	39.7	26.5	32.7	21.9	28.4		88.5	
Local Communities	Sites operating stewardship & local community liaison schemes (%)	KPI	0	0	0	0	0	0	0	Introduce local community liaison initiatives	0	✗
		Industry Benchmark	5.9	2.0	0.0	0.0	0.0	0.0	0.0		0.0	

(1) Independently verified figures by CM Environmental

## AIRTEC AERATED BLOCKS

Metric	Unit		2017 <sup>(1)</sup>	2018 <sup>(1)</sup>	2019 <sup>(1)</sup>	2020 <sup>(1)</sup>	2021 <sup>(1)</sup>	2022 <sup>(1)</sup>	2023(1)	2024 Target	2024 <sup>(1)</sup>	Target Met?
Quality	Sites operating to ISO 9001 (%)	KPI	100	100	100	100	100	100	100	Maintain ISO systems	100	
		Industry Benchmark	87.5	87.5	88.9	86.0	83.3	100.0	100.0		100	
Water	Total mains water / tonne product (litres/tonne)	KPI	10.9	8.1	17.6	5.8	6.1	6.6	11.9	Maintain low figures	22.1	
		Industry Benchmark	323.5	338.6	375.1	299.6	317.3	323.5	295.08		356.9	
	Non-mains water / tonne product (litres/tonne)	KPI	1056.8	903.2	1139.5	999	1193	1117	1529	Maintain > industry benchmark	1387	
		Industry Benchmark	284.2	302.0	306.0	208.2	207.6	192.6	203.7		202.0	
Energy	Total energy use per tonne of product (kWh/tonne)	KPI	285.3	276	265.8	312.7	309.5	324.4	371.5	Reduce energy consumption to < 300	360.4	
		Industry Benchmark	240.2	239.1	248.5	199.8	206.1	195.7	207.5		200.3	
CO <sub>2</sub>	Total CO <sub>2</sub> per tonne product (kgCO <sub>2</sub> /tonne)	KPI	57.16	53.51	51.10	62.68	57.93	59.98	69.24	Reduce greenhouse gas generation	67.13	
		Industry Benchmark	50.88	49.21	46.46	36.51	37.08	34.76	36.33		34.30	
Packaging	Total packaging/tonne product (kg/tonne)	KPI	4.15	6.61	6.46	6.99	7.22	7.46	8.1	Continue to use minimal packaging	10.22	
		Industry Benchmark	10.92	12.64	15.02	7.10	5.51	4.62	4.94		4.47	
Waste	Total waste/tonne product (kg/tonne)	KPI	0.19	0.08	0.09	0.14	0.01	0.04	0.11	Aim towards zero waste to landfill by 2025	0.06	
		Industry Benchmark	38.41	68.18	68.18	8.73	30.69	45.66	43.65		61.4	
	Waste to landfill (kg/tonne)	KPI	0.03	0	0	0	0	0	0		0	
		Industry Benchmark	0.12	0.09	0.07	0.04	0.01	0.01	0		0.00	
Secondary aggregate use (excl cement)	% Secondary aggregate use / recycled aggregate	KPI	100	100	100	100	100	100	100	Maintain > 90%	100	
		Industry Benchmark	99.2	100.0	85.0	79.4	79.0	83.3	82.9		74.6	
Environmental	Sites operating to ISO 14001 (%)	KPI	100	100	100	100	100	100	100	Maintain ISO systems	100	
		Industry Benchmark	100	100	100	100	100	100	100		100	
Responsible Sourcing	Sites operating to BES 6001 (%)	KPI	100	100	100	100	100	100	100	Maintain BES 6001	100	
		Industry Benchmark	87.5	87.5	88.9	83.3	83.3	91.7	87.5		87.5	
Health & Safety	Sites operating to ISO 45001 (%)	KPI	0	0	0	0	0	0	0	Gain ISO 45001 by 2025	0	
		Industry Benchmark	75.0	75.0	77.8	66.7	66.7	91.7	100.0		87.5	
Transport	Average delivery distance (km/delivery)	KPI	101.3	40	94	94	91.2	84.8	84.8	Maintain < than benchmark distances	74	
		Industry Benchmark	111	111	127	132	140	150	203		238	
	Average delivery lorryload (tonne/delivery)	KPI	22	22	26.7	27.2	27.1	27.4	27.4	Maintain figures in line with benchmarks	45.8	
		Industry Benchmark	23.1	23.1	24.4	20.4	23.4	24.2	24		23.4	
Training	Average time spent on training (hrs/employee/year)	KPI	6.5	3	6.5	2.9	1	8.1	20.8	Increase training hours to > 7 hours	7.8	
		Industry Benchmark	11.3	7.6	10.4	23.5	20.1	10.2	10.2		29.7	
Local Communities	Sites operating stewardship & local community liaison schemes (%)	KPI	0	0	0	0	0	0	0	Introduce local community liaison initiatives	0	
		Industry Benchmark	12.5	0.0	0.0	0.0	0.0	8.3	8.3		0.0	

(1) Independently verified figures by CM Environmental



## Our Concrete Block Plants

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**Established 1830**