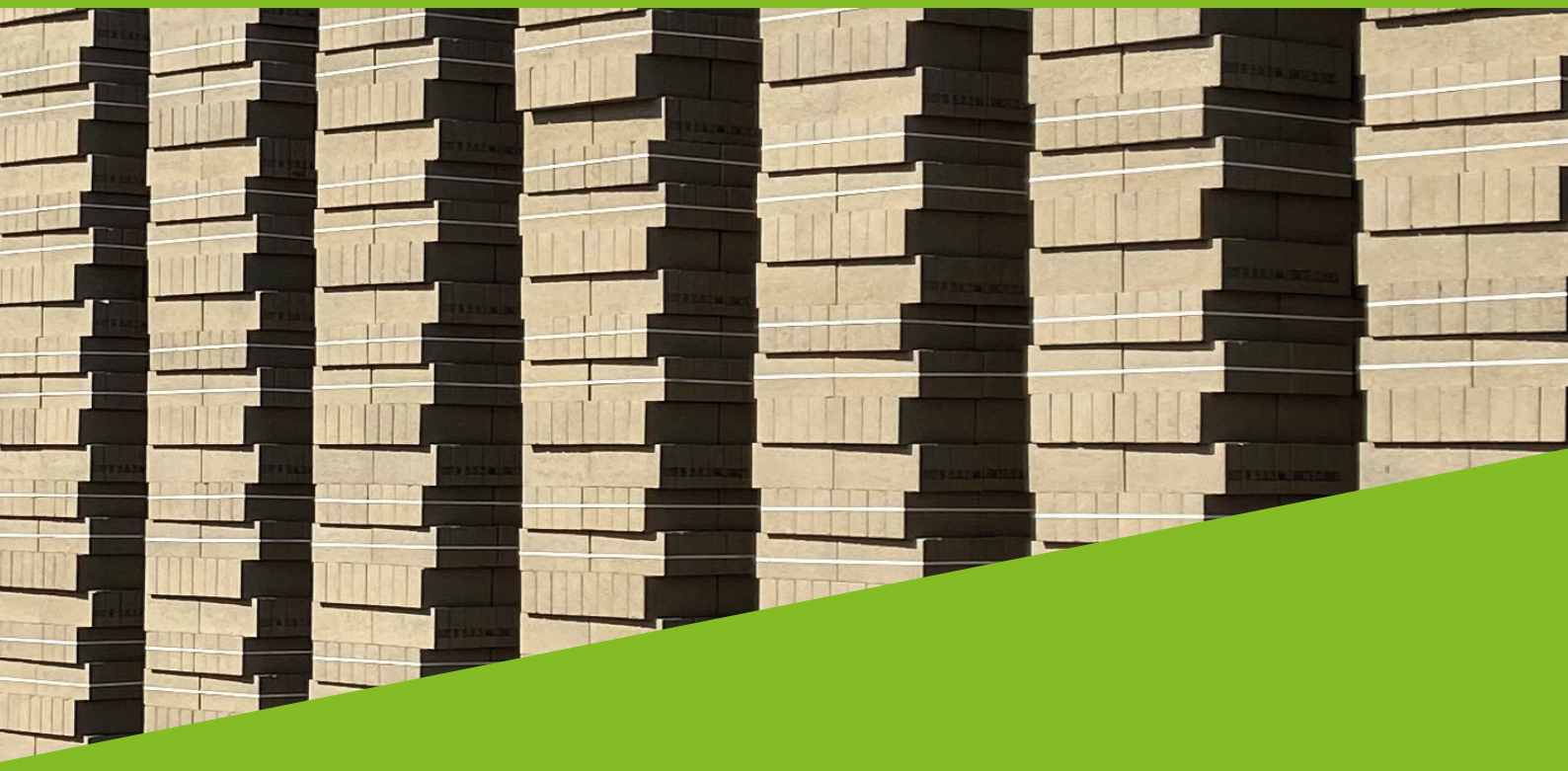
LIGNACITE
Sustainable Masonry



SUSTAINABILITY REPORT 2024

www.lignacite.co.uk

Our commitment

We have always been committed to providing a high-quality, sustainable product, produced to the highest possible standards.

We ensure that manufacturing potential is maximised through the reuse of otherwise waste materials, reducing the overall impact on landfill and subsequently minimising the effect upon the environment.

Lignacite first achieved certification to ISO 9001 (quality management) back in 1990. In this year we also achieved our kitemark licence and committed to making our blocks to a strict quality standard (EN 771-3). By 2012 we had added ISO 14001 (environmental management) to our list of certifications. Then, in 2020, ISO 45001 certification (occupational health and safety management) was achieved. In 2022, we met the standard for ISO 50001 (energy management), which holds us to high levels of energy management. In 2023, our integrated management system was certified to PAS-99.

The target for 2025 is to achieve certification for ISO 27001, the international standard for Information Security Management Systems.

A greener future

When it comes to carbon emissions, the biggest cause of these is transportation. In 2022, Lignacite produced 1,254 tonnes of carbon emissions. 66% of these emissions were caused by our HGV fleet.

In 2023 we significantly lowered our carbon footprint by switching our plant vehicles to HVO (Hydrotreated Vegetable Oil). This reduced annual CO_2 emissions by more than 400 tonnes.

For 2025 the focus will be on switching our extensive haulage fleet to HVO. This will be a significant undertaking, but at Lignacite we are not afraid of hard work. By switching to this much greener fuel, the potential CO_2 savings are huge, with a potential to save over 700 tonnes of CO_2 per year across the business.

The focus has been on monitoring the cost of HVO. This focus will continue but will now also extend to looking at how we can implement this change across the business.

Watch this space.

The circular economy

A focus for 2024 and 2025 is moving the business towards a circular economy. For many years, the model used by businesses across the world was "Production-Use-Disposal". The circular economy model looks to break this outdated model and instead promotes a cycle of reuse and recycle. This results in much less waste.

Lignacite is currently investigating how we can implement this model into our business. It could mean rubble from demolished buildings being turned into a sustainable aggregate and then incorporated into our blocks. This will involve us looking to purchase more recycled materials and putting less focus on primary aggregates.

At Lignacite we are always looking to see what steps we can take put less of a drain on the Earth's natural resources. Transitioning to a circular economy is another step in our journey toward becoming one of the UK's greenest, environmentally friendly block manufacturers in the country. Further updates on our commitment to working towards a circular economy will be published on our website.

The Lignacite ECO Range

At Lignacite, we have always had a strong focus on making our products as sustainable as possible. We recognised that our blocks should contain more recycled materials, fewer primary materials and less cement. With this in mind, we developed our new Lignacite ECO Range.

The first to be launched was the Lignacite ECO 50 and the Lignacite ECO 70, containing 50% recycled material and 70% respectively. Currently a 7.3N 100mm and 7.3N 140mm version of this block range is available. We hope to launch coursing blocks in 2025. A 10.4N version of the block will also be launched during 2025.

The 100mm block contains 67% less embodied carbon than the standard version of the block. The 140mm version contains 47% less embodied carbon. By delivering the blocks using HVO fuel, 90% less carbon emissions will be generated compared to delivery using diesel.

Focus in 2025 and beyond will be on developing ECO versions of the rest of our block ranges. Check our website regularly for further updates.

Supporting the local community

We're committed to having a positive impact on our customers, colleagues and communities. One of our core values is "we stand within our community"; our people are proud of the part they play in their local communities. We ensure that we support local communities and residents through every contract we undertake, providing better access to employment and training opportunities. We also work closely with our customers to understand their customers' requirements. By offering a bespoke approach to every delivery, we ensure that we contribute positively to the local communities in which we conduct our operations, taking into consideration the issues that matter most to those impacted by our operations.

We are actively involved in the local communities at both sites. As one of the largest employers in Brandon, we feel that we need to support those around us. Although Nazeing is not situated within a residential area, it still supports. those local groups and communities they can. Over the last year we have:

- Sponsored a local under 11's football team
- Sponsored local town football clubs
- Sponsored a local pony club
- Sponsored local events
- Supported and donated to local charities

On a national level, our Chief Operating Officer completed the Walk of London – over 26 miles from west to east London – in aid of Barnardo's and the Band of Builders Charities. He also completed the Chelmsford Half-Marathon in aid of Cancer Research. The business also supported charity work in Ukraine.

Giving back to nature

A plan is being developed to turn the former quarry area at our manufacturing site in Brandon into a nature reserve. Plans are still very much in the early stages of development but are building well and producing a lot of excitement as they grow. We are currently working closely with the local authority, the Norfolk Wildlife Trust and the RSPB to identify what we can do, what we need to do and more importantly how we can encourage and support the local wildlife to thrive in this beautiful area.

Our vision is to create a truly amazing, peaceful and tranquil pocket of nature, which staff and invited guests can enjoy. It is hoped that works to develop the area will begin in June, with the first phase of the plan to be completed by the end of October.

Check our website for further updates.

Verification of data

A key improvement initiative is to obtain external verification of data used to set objectives and targets. Independent data verification has been achieved through NR Richards Associates Limited, a respected construction-focused organisation in the field of environmental and sustainability performance.

The data presented in the table below shows our performance during 2024, with previous years' performance presented alongside where available. Significant improvements were made last year regarding the recording of KPIs to allow for more accurate monitoring of energy usage and carbon emissions.

ASPECT	UNIT OF MEASURE			
		2022	2023	2024
Electricity Use	Total KWh	2,201,474	2,403,587	2,402,707
	% Renewable	7%	3%	8%
	KWh / M^2	0.76	0.89	0.79
Natural Gas Usage	Total KWh	69,899	56,534	55,130
	KWh / M^2	0.02	0.02	0.02
Total Diesel Usage	Total KWh	5,218,982	3,287,139	3,281,520
	KWh / M^2	1.81	1.22	1.37
LPG Usage	Total KWh	0	0	0
	KWh / M^2	0	0	0.00
HVO Usage	Total KWh	210,180	2,026,346	1,879,333
	KWh / M^2	0.07	0.75	0.76
Kerosene Usage	Total KWh	N/A	N/A	329,923
	KWh / M^2	N/A	N/A	0.14
Total Energy Usage	Total KWh	7,700,534	7,849,073	7,272,263
	KWh / M^2	2.69	2.92	3.03
Carbon Footprint	Total Kg	1,782,062	1,411,876	1,318,550
	Kg/ M^2	0.62	0.52	0.55
Mains Water Usage	Total Litres	9,898,000	9,912,000	8,933,200
	Litres / M^2	3.43	3.68	3.72
Borehole Water Usage	Total Litres	15,381,100	10,180,000	7,535,000
	Litres / M^2	5.33	3.87	3.14
Total Water Usage	Total Litres	22,279,100	20,092,000	16,468,000
	Litres / M^2	7.72	7.47	6.85
Transport (Raw Materials to Site)	Total Deliveries	22,352	20,978	16,665
	Average Tonne/Delivery	23.14	23.18	26.44
	Average Delivery Distance	89.7	84.10	62.73
Transport (Delivery of Products)	Total Deliveries	22,752	21,454	19,867
	Total M^2	2,797,912	2,701,291	2,351,421
	Average Distance (KM)	894,940	2,111,894	1,246,305
Own Waste Recycled Off Site	Total Tonnage	16,399	19,339	18,102
	KG / M^2 Production	0.006	0.007	0.007
Waste Disposal to Landfill	Total Tonnage	8.00	0	1
Aggregate Consumption	Total Tonnage	518,409	486,020	435,845
	% Secondary / Recycled Material	7.9	6.1	6.4
Training and Development	Total Training Hours	1,242	Not Verified	305
	Total Training Hours / FTE / Year	3.21	Not Verified	3.08