# Environmental Sustainability Annual Report 2022







St Aiden's RSPB Nature Reserve. This site is located close to the Brandon Medical Headquarters and represents an environmental success story. The site was formerly an open cast coal mine and has now been transformed into a nature reserve of national significance. Photo by Tim Melling

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## A global player in healthcare equipment

Brandon Medical delivers smart equipment for acute and primary healthcare. For 75 years, a focus on continuous product innovation has helped us to provide healthcare professionals with reliable, high quality and affordable medical equipment packages for operating theatres and critical care.

We are acknowledged experts in the design and manufacture of medical lighting, medical supply pendants, medical power & control systems and medical audio-video systems that are customised to meet the requirements of medical teams.

The Brandon Medical HQ and factory is based in Leeds, UK, with a satellite base in Kuala Lumpur, Malaysia. Brandon Medical is a truly global supplier with customers in over 70 countries.



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Brandon Medical HQ in Leeds, UK

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#### Why sustainability?

At Brandon Medical we are committed to reducing the environmental impact of our activities. This is driven by our belief in creating a sustainable society and a desire to support our customers in their journey to Net Zero.

The goals for our sustainability activities can be summarised as:

- 1. Reduce Brandon Medical's carbon footprint
- 2. Promote biodiversity and improve the working environment
- 3. Support our customers in achieving their own sustainability targets



NHS definition of Carbon Footprint and Carbon Footprint "Plus". Image from "Delivering a 'Net Zero' National Health Service" - July 2022

### Supporting a Net Zero NHS

A significant end user for our products is the UK National Health Service, which aims to be the world's first Net Zero health service.

The NHS have set two headline sustainability targets:

- 1. For the emissions they control directly (the NHS Carbon Footprint), they will reach net zero by 2040, with an ambition to reach an 80% reduction by 2028 to 2032;
- 2. For the emissions they can influence (NHS Carbon Footprint Plus), they will reach net zero by 2045, with an ambition to reach an 80% reduction by 2036 to 2039.

Brandon Medical's sustainability activities will support the NHS in delivering their Carbon Footprint Plus targets.

### How will we achieve this?

2022 has seen the formation of a Sustainability Working Group that will be responsible for developing strategies and supporting delivery of change. The working group consists of volunteers from a wide range of functions within the company.

The Sustainability Working Group have identified five main areas of focus:





Brandon Medical manufacturing facility in Leeds, UK



Brandon Medical carbon footprint due to gas use (kWh to kg of CO<sub>2</sub> conversion factor = 0.21)

We have already made impressive changes to our electricity usage through

farm. These solar panels offset

the installation of our own rooftop solar

approximately 5 tonnes of CO, per year

(10% of our electricity requirement).

Gas is used to heat the office and factory areas and to provide hot water. Short term improvements will be made by draught-proofing the factory windows and by optimising the heating system settings.

In the medium term, we will consider a move to a heat pump system for office heating.

To build on this good start, we will be committing to a programme of production optimisation to reduce electricity use. We will also investigate expanding our solar farm.

In the longer term, the UK commitment to renewable electricity generation will support further reductions in CO<sub>2</sub>.

### **Energy and utilities**

Strong focus will be given to reducing the consumption of gas, electricity and water at the Brandon Medical HQ.

#### Energy efficiency rating for this property



The NHS have set two headline sustainability targets:

The Brandon Medical HQ building was constructed in the 1970s and, as with other buildings of that time, has some energy efficiency challenges.

An accredited survey of the property found that it had an energy efficiency rating of B. This rating is significantly better than comparable buildings (typically C).

Only limited water usage data was available at the time of publication. The monthly water consumption between November 2021 and April 2022 averaged at 26.1m<sup>3</sup>. If this is extrapolated to full year and a conversion factor of 1 is used [2] then then Brandon water consumption generates 0.2 tonnes of CO<sub>2</sub> per year. This figure is very small when compared to the other sources of CO<sup>2</sup> emissions, but efforts will still be made to minimise water use. New presence detecting taps have been installed in staff toilets that will support reduced water use.

[1] Gas industry project H21 Leeds City Gate - https://h21.green/projects/h21-leeds-city-gate/ [2] "Measuring scope 3 carbon emissions - water and waste Report to HEFCE by Arup and De Montfort University", January 2012

There are potentially significant longer-term improvements associated with the transition in the Leeds area to hydrogen-based gas supply for domestic and commercial use [1].



Brandon Medical carbon footprint due to gas use (kWh to kg of  $CO_2$  conversion factor = 0.21)

### **Product design**

Brandon Medical's most significant products in terms of manufacturing output are the Quasar range of operating room lights. When the full product lifecycle is considered, the materials used in the Quasar products generate significant carbon footprints that fall into the Scope 3 category.

Major efforts are currently being made to reduce these figures through improved material selection and design.

Focus is also being given to designing future products that are as durable as possible to maximise design life. New products will be designed so that when end-of-life is reached there are options for refurbishment and recycling of parts.

arbon Footprint			Carbon Footprint		
	Material:	740 kg CO2e		Material:	740 kg CO2e
	Manufacturing:	240 kg CO2e		Manufacturing:	240 kg CO2e
	Use	0.00 kg CO2e		Use	0.00 kg CO2e
	Transportation	42 kg CO2e		Transportation:	42 kg CO2e
	End of Life:	11 kg CO2e		End of Life:	11 kg CO2e
1000 kg CO2e		*******************************	1000 kg CO2e		************************

#### Travel

The travel impact for Brandon Medical can be separated into two categories: staff commute to Brandon and business travel to customer sites.



#### **Business travel**

Covid pandemic.

### Waste

As a manufacturing business, Brandon Medical produces a significant quantity of waste materials. Scrap metal and machining swarf are already collected for recycling, as is cardboard packaging from delivered materials. Good progress has been made in implementing re-useable packaging for parts that are sent out for processing.

The Sustainability Working Group have identified that more can be done to promote recycling of office based waste and new bins have been installed for cardboard, paper and batteries. As the employee garden is developed, consideration will be given to composting kitchen waste.



#### Daily commute

Some positive steps have already been made; several company cars are now fully electric and four onsite charge points are provided.

At this stage, we do not have data on the impact of employee travel to the company facilities in the UK and Malaysia. An employee survey is planned that will help understand current travel modes, distances travelled and the support required to encourage more sustainable commutes.





Brandon employs a significant number of Sales Managers and Installation/Service Engineers that are predominantly field-based and frequently travel to customer facilities. Approximately 25% of the Brandon team fall into this category. The carbon footprint associated with this can be tracked through fuel expenses.

The chart shows an increase from 2020 to 2021 due to increased activity following the

Brandon Medical are developing remote equipment monitoring technology that will help reduce the number of repair visits (prior knowledge of the fault condition can help ensure the correct spare parts are taken). In the medium term, the biggest impact will be made through the transition to electric vehicles.





## Ecology

The Brandon Medical HQ site incorporates a significant amount of green space that provides good wildlife habitat. There are currently 30 trees on site (mostly young) and over their life they could each capture one tonne of CO<sub>2</sub>. However, there is good potential to further promote biodiversity and there are opportunities for increased carbon capture through additional tree planting.

As part of this process, we have sought input from our neighbours at the Bridge Street Allotments. The allotment committee were very supportive and during a site visit they have made several recommendations. As a result of this, opportunities have been found for wildflower meadows and promising sites for tree planting have been identified.

The initial biodiversity activities have included the creation of a small wildflower test area and the addition of a bird feeding station. We have seen a noticeable increase in bird activity, including new visitors such as collared doves.

The ecology activities will be combined with efforts to improve outside seating areas for employees. A small-scale employee fruit and vegetable patch is also under consideration and as a trial, the first Brandon tomatoes are starting to come through.

### **Targets**

The targets set by the Brandon Sustainability Working Group are intended to be as ambitious as possible, while remaining realistic. We have tried to combine immediate easy wins with longer term strategic goals.

#### C02 Emmisions in tonnes per £M turnover:

Gas	<b>Deisel</b>	Electricity *	<b>Total</b>
(Scope 1)	(Scope 1)	(Scope 2)	(Scope 1 + 2)
9.4	13.0	4.1	26.5
8.5	11.1	3.7	23.3
(10% reduction)	(15% reduction)	(10% reduction)	(12% reduction)
1.9	zero	2.6	4.5
(80% reduction)		(37% reduction)	(83% reduction)
	Gas (Scope 1)   9.4   8.5 (10% reduction)   1.9 (80% reduction)	Gas (Scope 1)Deisel (Scope 1)9.413.08.5 (10% reduction)11.1 (15% reduction)1.9 (80% reduction)zero	Gas (Scope 1) Deisel (Scope 1) Electricity * (Scope 2)   9.4 13.0 4.1   8.5 (10% reduction) 11.1 (15% reduction) 3.7 (10% reduction)   1.9 (80% reduction) zero 2.6 (37% reduction)

\* Electricity figures are based on total emissions minus the contribution from on-site solar generation

#### Product design - Scope 3 Emissions

Reduction in CO2 due to manufacturing materials by 2024	30% reduc Quasar ran
Product design – Scope 3 Emissions	
Reduction in CO2 due to manufacturing materials by 2024	Plant six ao Manage cu
Biodiversity improvements by 2023	Convert the pollinators Install nest

We believe these ambitious targets will provide strong support to the NHS in achieving their Carbon Footprint Plus targets of 80% reduction by 2036 to 2039 and reaching net zero by 2045.

> ction in CO<sub>2</sub> required to produce the main components of the nge of products.

dditional trees urrent tree stock to maximise growth where appropriate

he majority of the 140 m<sup>2</sup> of lawn to plants that will support and promote biodiversity. boxes

Follow Brandon Medical on LinkedIn to learn more about our sustainability journey. brandon-medical.com/linkedin





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