

Brandon Medical Green Plan for a Sustainable and Zero Carbon Future

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1.0 Foreword

"Brandon Medical recognises the enormous challenge that climate change, air pollution and waste present and the impact these issues will have on our World. We have already undertaken excellent work to address these issues and have set ourselves a new Green Plan, which builds upon our progress so far. Climate change represents a significant challenge for the 21st century and this Green Plan details a proactive approach that our Company can take to do our part to reduce our impact on climate change. As a Company, we seek to operate in a socially responsible way and I firmly believe that making our Company as environmentally, economically and socially sustainable as possible helps us to fulfil this aim. Implementing the actions presented within this Green Plan will help ensure that Brandon Medical is creating the best environment for our staff, suppliers and customers. This comprehensive strategy will enable us to improve our environmental sustainability and will help to mitigate the potential impacts of climate change. We need to embed sustainability within our organisation and must work together with our stakeholders to improve sustainability. We will collaborate with our partners to help meet our own internal objectives and also the wider city level and national level objectives. For Brandon Medical to be a truly sustainable organisation, we need all our staff to play their part in delivering this Green Plan and I strongly encourage all of our colleagues to work together to achieve these aims."

Graeme Hall

Executive Chairman





1.1 Highlights to date

Brandon Medical already recycle aluminium and steel waste, cardboard, waste oils, cardboard, polyethylene and paper.

1.1.1 Insulate first.

- Roof 100mm of insulation
- Skylights Lights Replace single glazing with high U' value polycarbonate panels
- Wall Cladding on external walls 100mm
- Replaced windows with high U' value double glazing
- Replace roller shutter doors with insulated and sealed units
- Replace external doors with high U' value doors

1.1.2 High-efficiency heaters appropriate for each area

- Decommissioned old centralised boilers
- Pair of highest efficiency combi boilers for office central heating and domestic hot water
- Gas space heaters, sized for heavily insulated buildings and positioned to create a flow of warm air around the factory
- De-stratification fans which are vital in high-roof space buildings
- Infra-Red heaters in loading bays to heat people, not space when doors are open for deliveries.

1.1.3 Ventilation

- Automatic opening of skylights to vent stale and hot air in hot weather
- An absolute minimum of air conditioning (file server room and clean room only)

1.1.4 Lighting

- Right amount and type of light in right place Computer Light Planning (Relux or DiaLux)
- Efficient luminaires which must be part of the light planning (efficient light source doesn't mean efficient lighting and there are lots of rubbish light fittings that don't light our rooms)
- We use T5 and LED luminaires that are checked to meet the computer light planning
- Daylight harvesting turn lights off when there is enough natual lights (maximise use of natural daylight)
- Presence/absence detection (don't light up un-occupied rooms)

1.1.5 Sensors and Controls

- BMS control system for everything (automate, remove human interference, optimise)
- External and Internal multipoint temperature sensors, rain sensors (to close sky lights), daylight sensors, light level sensors and presence/absence detection.
 - Heating
 - Ventilation (opening sky lights)
 - Compressed air
 - Factory Lighting
 - Office Lighting



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1.1.6 On-site generation

• 30 kVA Roof mounted Solar PV

1.1.7 Electric Vehicles

- Currently have 4 fast EV chargers for company vehicles
- Currently operate 3 EVs and 2 hybrids as company vehicles

2.0 Introduction

Brandon Medical has the aspiration to become one of the greenest companies in the UK. This Green Plan provides an organisation wide strategy that includes a high-level vision and strategic objectives, as well as detailed actions that will deliver this vision. This Green Plan builds upon the success of the previous environmental action plans which the Green Plan replaces. The Green Plan serves as the central document for the Companies's sustainability agenda and provides the rationale for sustainability at Brandon Medical, objectives the Company has set for itself and the means by which they will be met.

2.1 Sustainability at Brandon Medical

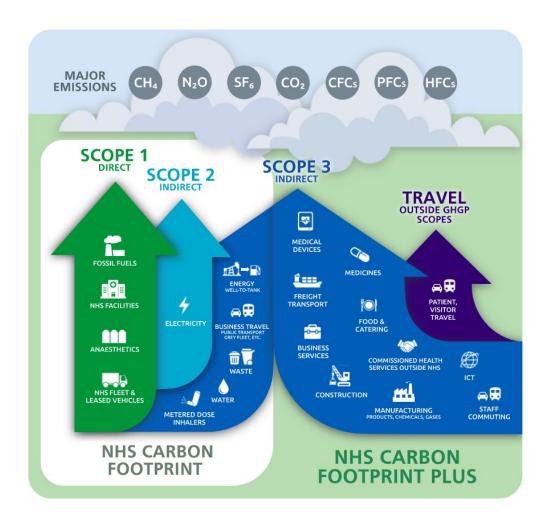
This Green Plan establishes the Brandon Medical's sustainable vision, our targets and the actions by which to achieve this vision. The Company considers sustainability to be a key issue facing the future, for the Company, our customers, the UK and beyond. Brandon Medical has recognised the need to incorporate sustainability into our activities since incorporation in 1993. The Company has a sustainability team to progress the sustainability agenda at the Trust and to implement the aims, ambitions and objectives established within this Green Plan.

2.2 Sustainability at a National level

In January 2020, Sir Simon Stevens the CEO of NHS England announced the "For a Greener NHS" campaign. This campaign seeks to provide high-level backing for the NHS to adopt sustainability measures in an effort to combat the issue of climate change. Climate change is recognised as a key health crisis facing the world in the 21st century by a number of organisations including, but not limited to the British Medical Association, the Royal College of Physicians and the Royal College of Nursing. The UK is committed to becoming carbon neutral by the year 2050, as per the Climate Change Act 2008. The national NHS targets and targets within this Green Plan are derived from the Climate Change Act 2008. As part of the For a Greener NHS Campaign, an expert panel has been commissioned to review how the NHS can achieve Net Zero as soon as possible. Brandon Medical will continue to monitor these findings and review and update this plan accordingly.







2.3 Summary of Key Areas of Focus

- 1. Electricity (Scope 2 Emissions)
 - Reduce our use through a number of small measures (lighting controls, clean room a/c, computer switch-off policy)
 - Plan to add power conditioning, smart sub-metering and more onsite PV
 - The greening of the grid supply will continue towards 100% green electric by 2035.
- 2. Gas (Scope 1 Emissions)
 - Reduce use by lowering room temperature on the BMS
 - H21 Leeds City Gate aims to change our supply to 100% hydrogen between 2026-2029
- 3. Diesel/Petrol (Scope 1 Emissions
 - Vehicles Need to start moving from diesel to EV. Diesel is our biggest carbon emitter.
- 4. Sustainability Team. Team of volunteers
 - **Energy Manager**
 - Identify and document our waste streams
 - Map employee travel (for travel plan)
 - Ecology (wild flower meadow, bird feeders and bird boxes, tree planting)



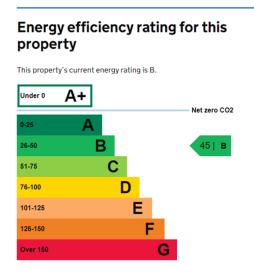
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Scope 3

Start to estimate and define our scope 3 emissions.

3.0 Progress to date



Brandon Medical purchased new buildings in 2011. Since then the Company has engaged in a significant programme of activity to manage and reduce our carbon emissions, and mitigate our impact on the environment. The buildings were completely refurbished to the latest environmental performance standards and the business was relocated to the new site in 2013. Since 2013 there has been a process of optimising the building control systems and of incremental improvements to environmental performance. Before these actions the buildings had an EPC (Energy Performance Certificate) of F. The rating increased this to D after the initial refurbishment and systematic optimisation has further increased the EPC rating to B in 2021. This is an outstanding achievement for a working manufacturing site.

The Company made a "Pledge to Net Zero" in 2021, which commits to achieving net zero carbon by 2050. This is a massive step change and it isn't clear how it can be achieved by a manufacturing company so the initial phase of work has been to collect information and to develop thinking on how to achieve the pledge. The culmination of this phase is the development of this Green Plan setting out where we are now and our journey to net-zero.

One approach that the Company has rejected is the purchase of carbon off-sets which is just a way to buyout the problem without developing real improvements. Carbon offsets do not encourage companies to reduce energy use and they are a disincentive to developing on-site generation of renewable energy. Brandon Medical aims to deliver genuine improvements that it can verify and validate by reducing energy use, generating green energy and changing over to "green energy" sources where it cannot generate it's own.

This section reviews how the Company is performing against its objectives and the actions that are in progress to improve our sustainability.

3.1 Carbon Footprint

Brandon Medical has started the journey to Net Zero by benchmarking the Company's Scope 1 and Scope 2 emissions for FY (Brandon Medical's financial year November- October) 2020 and 2021. Both years were affected by Covid where the Company operated with all the windows and doors open for fresh air ventilation throughout the winter months which increased heating (gas) use yet there were reductions in vehicle fuel due to less travel by sales and service staff. FY2021 has been selected as the most representative year with an carbon footprint of 224 tkg CO2e. As a manufacturing company, Brandon





Medical's carbon footprint will vary with turnover so the Company will monitor it's CO2 per million £ of turnover which sets a base for FY21 of 22.55 tkg CO2e/£m

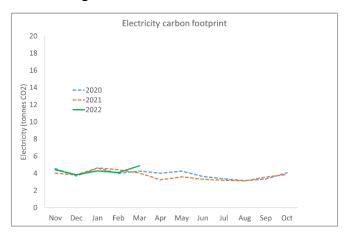
3.2 Electricity

Brandon Medical has taken steps to reduce the use of electricity by:

- installing energy efficient LED and T5 lighting with presence detection and daylight harvesting
- using sensors and a smart BMS (Building Management System) to control electrical loads
- plan to implement 2-component lighting in factory (purchased but not yet installed work bench lights so we can reduce the background illumination)

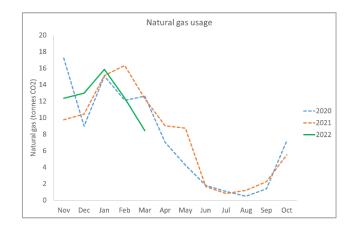
Brandon Medical has implemented on-site generation of green electricity by:

installing 30 kVA of solar PV generation



3.3 Gas

The Company invested in insulation with a new roof, wall cladding, double glazing and insulated doors. Heating systems were all replaced with the most efficient available. Sensors, de-stratification and a BMS (Building Management System) were installed to automatically control the heating and ventilation. The result has been a 55% reduction in gas used per m2.





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3.4 Vehicle Fuel

Brandon Medical operates a fleet of company vehicles comprising cars and vans. The Company has maintained the efficiency of the fleet with a policy of replacing vehicles with new ones when they reach 4 years of age, ensuring that they meet the latest emission standards.

The Company has started the transition to EVs (Electric Vehicles) by installing 4 fast EV chargers and with 3 electric vehicles in operation in 2022.

3.5 Oil

Oil is not used as a source of energy. A small amount of cutting oil is used in the CNC machine shop which is recycled after use. Any use is de minimis therefore, annual consumption of oil and any associated emissions, are not subject to any reduction interventions.

3.6 Water

Water is used in the staff welfare facilities however there is very little use of water in Brandon Medical's manufacturing processes with any use being de minimis therefore, annual consumption of water and any associated emissions, are not subject to any reduction interventions.

3.7 Waste

Brandon Medical has implemented the recycling of aluminum, steel, waste oils, cardboard, polyethylene, dry cell batteries and paper. There is a small amount of residual waste that is processed by a waste and recycling company.

3.8 Sustainability Team

Brandon Medical has established a cross-functional Sustainability Team with staff from across the business to develop staff engagement in improving sustainability.

- Travel Plan. The first step on reducing employee travel is to work out how staff travel to work and how far they travel. The sustainability team will start this project during 2022.
- Lighting energy use reduction. The team are introducing 2 component lighting on factory benches so we can reduce the Lux level of the general lighting and associated energy use.
- Insulation improvement. The team have identified the paint prep doors and the windows in assembly as leaky and are making proposals for rectification.
- EV charging. Provision of EV chargers for our staff to charge their vehicles at work (to encourage EV use). There would be a charge for the electric and a small profit to the Company to cover the costs of provision. We could set up EV chargers that are accessible to the general public at the weekends to sell some of our solar PV for a profit (the export tariff is only about 7.5p per unit)
- Ecology. (Mainly interested in gardening). Staff have planted a flower meadow which should reduce costs of cutting grass as well at attracting bees. New bird bath and bird feeders have been installed. Considering an outdoor seating area opposite the canteen door to improve working



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- environment for our staff. Tree planting is worth considering (6 trees = 1 tonne pa CO2) and we do have space to plant some more (might manage 12).
- Waste Streams. The team are looking at what we recycle and where it goes to make sure it is being done properly. We need to look at what goes into the skips and what happens to it when it leaves Brandon Medical (is it recycled or not)
- To help improve both biodiversity and human wellbeing, the Sustainability Team has worked to promote, establish and safeguard green space within our estate. These green spaces include maintaining green areas, installing bird boxes, bird feeders and installing a wild flower "meadow". The site currently (2022) supports the equivalent of 24 trees that capture an estimated 4 tCO2 pa. Further tree planting is being planned.





3.9 Plastic Packaging

Brandon Medical has largely eliminated the use of single-use plastic packaging materials. Our products are packed in re-recyclable corrugated cardboard. We have changed from plastic packing tape to paper packaging tape to aid the recycling of cardboard cartons. Exports are packed in wooden cases. We still use polyethylene bags to project products from abrasion during transit, which is easily recyclable in most locations.

4.0 Objectives and targets

Building upon the success the Company has already achieved, we now set forth the new drivers, objectives, targets and actions. The Company's overall vision is to become one of the Greenest in the UK and ensuring we follow the most up-to date and pertinent guidance as a key means by which to achieve our vision. An endorsement of the importance of setting and meeting these targets has been included from the Board of Directors.



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"Sustainability is a key priority for Brandon Medical and we recognise that by setting ourselves ambitious targets and making fundamental and innovative changes to the way in which we operate we can drive forward environmental, economic and social performance. We have developed this Green Plan to embed sustainability across every area of the organisation and to provide a framework against which we will continue to monitor and challenge ourselves."

Keith Jackson, CEO on behalf of the Board of Brandon Medical Co Ltd

4.1 Sustainability Drivers

UK legislation and health sector specific policy drives sustainable healthcare within the NHS. This section of the document outlines Brandon Medical's commitment to helping the achieve national targets. There are three key NHS specific documents that establish sustainability drivers for NHS Trusts:

- NHS Long Term Plan
- NHS Standard Service Contract 2020/21
- NHS Operational Planning and Contracting Guidance

The NHS Long Term Plan sets out how the NHS will transform and improve over the next 10 years and includes considerations pertaining to sustainability. The NHS Standard Service Contract contains a series of targets and objectives pertaining to sustainability and is an integral requirement for NHS Trusts. In order to achieve the environmental targets, set by the government and to sustain the NHS in the future the NHS Operational Planning and Contracting Guidance provides guidance on the actions required in 2020/21 including operational requirements, workforce transformation requirements, financial requirements, and the processes and timescales associated with these requirements. The following targets and objectives are explicitly stated in the above documents:

- Deliver a 4% reduction (in carbon emissions) by shifting to lower carbon inhalers;
- Deliver a 2% reduction (in carbon emissions) by transforming anaesthetic practices;
- Reduce the NHS' carbon footprint by one third of the 2007 baseline by 2020 through improving energy efficiency;
- Purchase 100% renewable electricity at all NHS organisations by April 2021; and,
- Adopt the single use plastics pledge.

In January 2020, the CEO of the NHS, Sir Simon Stevens, launched the For a Greener NHS campaign which will help to address the NHS' impact on climate change, air pollution and waste. Success in this campaign will require action from NHS staff, hospitals and partners across the UK. The Climate Change Act 2008 established a legislative requirement for the UK to be carbon neutral by 2050. This is the primary legislative driver for carbon reduction in the UK and established a clear mandate for organisations to manage and reduce their carbon emissions. This provides a clear framework to assist the UK in reducing greenhouse gas



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emissions and adapting to climate change. With increasing evidence that the UK needed to make greater reductions in its carbon emissions, the legally binding carbon reduction targets required by the Climate Change Act were increased in 2019

4.2 The Targets we will adopt at Brandon Medical

4.2.1 Carbon Emissions

There are a number of industry initiatives that have set out to help organisations to establish targets for carbon reduction. The Building Services Industry has set up the "Pledge to Net Zero" scheme (https://www.pledgetonetzero.org/) which Brandon Medical has selected to ensure good benchmarking to best practice. Brandon Medical made its "pledge" in May 2021, expressing its commitment to work towards zero emissions.

Pledge to Net Zero requires the company to set "Science Based Targets" for carbon reduction. The scheme recommends using the SBti (Science Based Targets https://sciencebasedtargets.org/) SME tool to establish what the Company's reduction target should be. The tool was used in May 2022 and established a Science Based Target for Brandon Medical of a 38% reduction in scope 1 and scope 2 emissions from the FY2021 base year by 2030.

In line with all pertinent legislation, contracts and guidance, Brandon Medical will adopt the following carbon reduction targets. These carbon reduction targets are to be measured against our baseline year of 2013-14, in which our carbon footprint was 107,501 tCO2 e. The targets are now:

- A reduction of 12% by 2026;
- A reduction of 38% by 2030; and;
- An overall reduction of 100% by 2050

It should be noted that the Company invested heavily in energy reduction measures in the years preceding 2021 but these were driven by financial savings rather than carbon reduction. Carbon benchmarking was carried out in FY2019 and FY2020 as the basis for carbon target setting and reduction monitoring. Unfortunately, these were the main Covid effected years when carbon output was affected by several conflicting issues such as operating buildings with increased ventilation which increased fuel use but there were also reductions due to less business travel. The new measures being taken by the Company require planning and implementation which are expected to start having an impact on carbon reduction in FY2023. For these reasons, a zero reduction target has not been set for 2022.

Performance against the targets will be monitored and managed by the Board and will be reported annually in the Company Statutory Accounts.



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Table 1 presents the required level of emissions (in tCO2 e) at each milestone year for the Company to adhere to the interim and overall targets.

Metric	2021 (Baseline)	2022	2026	2030	2050
Target Emissions %	100	100	88%	62%	0
Target Emissions (tCO2 e)	224	NA	NA	NA	0
Target Emissions (tCO2 e/£m)	22.55	22.55	19.84	13.98	0

4.2.2 Air Pollution

Air pollution is considered to be the largest environmental threat to health in the UK. Poor air quality is predominantly a result of the emission of particulate matter (PM), nitrous oxides (NOx) and sulphur dioxide (SO2). These pollutants have significant impact upon human health and can cause and exacerbate respiratory, cardiovascular and neurological illness. Furthermore, Leeds is frequently ranked as Top 5 city in the UK for worst air quality. Therefore, the issue of air pollution is of particular importance to Brandon Medical.

In order to reduce air pollution created by the Company, we will adopt the targets to transition to EVs.

4.2.3 Plastics and Waste

Brandon Medical produces a small amount of residual waste after recycling which includes plastics (excluding polyethylene which is recycled).

Recyclables are separated from the "Domestic" waste in the Refectory and go into the local recycling waste stream. Brandon Medical provides all its staff with stainless steel cutlery, crockery, re-usable drinking cups and dishwashers to clean them, eliminating the use of single-use plastics.

Residual waste is collected in skips which are managed by a recognised waste company to ensure that waste is managed and disposed of at the highest level of the waste hierarchy.

Brandon Medical has largely eliminated the use of single-use plastic packaging materials. Our products are packed in re-recyclable corrugated cardboard. We have changed from plastic packing tape to paper packaging tape to aid the recycling of cardboard cartons. Exports are packed in wooden cases. We still use polyethylene bags to project products from abrasion during transit, which is easily recyclable in most locations.



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5.0 A pathway to carbon net zero

Brandon Medical has already begun its journey towards carbon net-zero through the implementation of the first tranche of sustainability interventions. We have been successful in reducing our carbon emissions, implementing changes to reduce air pollution and improving the way in which we segregate and manage our waste. However, we must remain aware that our target to become carbon net-zero by 2050 is a monumental task. Reducing our carbon footprint, our contribution to air pollution and minimising our nonreyclable waste, whilst simultaneously continuing to provide excellent products and services to our customers will be hugely challenging. If we are to meet our objectives and targets and move to a carbonneutral position then we must adopt an extensive action plan to achieve this aim. Our Green Plan provides a comprehensive scope of interventions designed to improve the Company's level of sustainability, in our three key areas: carbon emissions reduction, air pollution reduction and waste reduction. The Green Plan concerns actions that we, as a company, can implement within our own organisation in order to meet our targets and objectives. Our Green Plan is presented, in detail, in Section 6. It is important to consider that the Company is by no means alone in our journey to Carbon NetZero. Indeed, the legal requirement to become carbon neutral is one shared by the entire UK, under the Climate Change Act 2008. As such, there are actions that will be taken which are outside the Company's control, which will have significant impacts upon our carbon emissions and will greatly influence whether or not we are able to become carbon neutral. Accordingly, this section explores potential changes on a local and national level, outside of the Company's control, that will have significant impacts upon our environmental impact.

5.1 The transition from natural gas to hydrogen

Work is underway within the city of Leeds to replace natural gas with hydrogen. The H21 City Gate Project seeks to convert the gas grid to hydrogen. Estimates suggest that by converting the gas grid to hydrogen, 73% of carbon emissions could be reduced in the UK. Leeds will be one of the first cities in the UK to convert to a fully hydrogen gas network, with works scheduled to take place between 2026 and 2029. The percentage of the grid converted to hydrogen will be increased slowly, this is so not to overload the suppliers and to provide adequate time for training. The grid and gas combustion appliances, including the CHPs, domestic appliances, may require conversion to ensure that they are suitable for hydrogen use. The conversion process will be carried out incrementally to minimise disruption to the gas network, with works in Leeds taking place over three years, between the months of April and September, when gas use is at its lowest. Hydrogen produces zero carbon at the point of use and has been proven to be safe when used instead of natural gas for heating. Carbon emissions are however generated when hydrogen is produced, through a process known as Steam Methane Reduction (SMR). SMR is a process by which methane (CH4) is separated into carbon monoxide (CO) and hydrogen (H2). Therefore, this process unavoidably creates carbon monoxide and therefore, carbon emissions. However, a key part of the H21 City Gate Project is to install carbon-capture storage (CCS) to capture carbon generated during the SMR process. If this project to convert Leeds from natural gas to hydrogen proceeds as is planned, then by 2029, the Company will potentially cease using gas and begin using hydrogen. This is a vital consideration in the Company's pathway towards net zero. Import of gas from the grid in our baseline year created 41% of total emissions.



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Therefore, if gas is replaced by the ultra-low emission alternative of hydrogen, our carbon emissions will be significantly reduced.

By fully converting to hydrogen, Brandon Medical could eliminate our carbon emissions from gas import in just three years between 2026 and 2029. Converting gas import to hydrogen import would provide a significant benefit to meeting the 2050 carbon net zero target and puts the Company on course to hit the 2030 CO2 e emission reduction target of 13.98 tCO2 e/fm.

Adopting Electric Vehicles

In February 2020 the Government announced that the sale of all new petrol, diesel and hybrid vehicles would be banned from 2035. These vehicles can be classified as internal combustion engine vehicles (ICEVs). The ban on new ICEVs will precipitate the adoption of electric vehicles (EVs) which, are zerocarbon at the point of use. Not only do EVs have lower carbon emissions that ICEVs they also produce significantly less air pollution and waste. Therefore, it can be seen, that the adoption of EVs will help the Company to meet its three areas of focus, carbon emission reduction, air pollution reduction and waste reduction.

In terms of carbon emissions, the use of ICEVs creates a significant proportion of Brandon Medical's carbon footprint. In our baseline year the vehicle fuel from the business fleet created 104 tCO2 e. This total represents 45.4% of total Scope 1 and 2 emissions.

The conversion from ICEV to EVs is already on the increase prior to the government ban in 2035. The change of national policy to replace ICEVs with EVs will help the Company to move towards carbon netzero. Furthermore, as EV charging networks increase, EVs themselves become cheaper and government taxes of fossil fuels increase, the adoption of EVs is likely to increase at a faster rate prior to 2035. This is further encouraged by the introduction of clean air zones in major UK cities, including Leeds and Bradford. This zoning is designed to encourage the transition to low and ultra-low emission vehicles. The use of ICEVs is a principal cause of air pollution through the release of tail-pipe emissions (particulate matter, NOx, SO2). EVs do not create tail-pipe emissions and therefore, provide a significant benefit for the reduction in air pollution within Leeds. Reducing air pollution can help to contribute toward improved health outcomes for our people.

The change to EVs is inevitable and has already started at Brandon Medical (3 EVs and 2 hybrid EVs in use in 2022). The Company could wait for this change to happen naturally over time however as this is a major component of carbon emissions, there is an opportunity to accelerate progress toward net-zero by actively working to convert our fleet to EV.

5.2 The impact on our carbon footprint

If successful, the conversion of the gas grid to hydrogen, the Government's plan for 100% green electricity by 2035 and the widespread adoption of electric vehicles could reduce Brandon Medical's Scope 1 and 2 carbon emissions to zero by 2035. This is reliant on all 3 Government schemes being successfully implemented, which is dependent on external factors. These schemes will have a long-term effect on our



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carbon emissions with the most significant reductions being achieved between 2026 and 2030 from the H21 City Gate project. These schemes will, alongside other sustainability initiatives set out in this plan, help move the Company towards a net-zero position in 2050. However, as we start to take Scope 3 emissions into account, we will still need further interventions to take the Company all the way to net-zero.

We have considered Scope 1 and 2 emissions first because these are clearly defined and the data is both easily accessible and accurate. Scope 3 emissions are much less well defined and there aren't any universally accepted standards for assessment. Brandon Medical's methodical step-by-step approach has been to look at different systems for measuring and calculating Scope 3 emissions and to select one of them. This may not be the perfect system however we need to start somewhere and as the understanding of Scope 3 emissions improves we can upgrade to better systems when they are available. This process will start in 2023 to calculate our Scope 3 emissions. Once these are established, the shortfall in carbon reductions can be measured as Scope 3 less our on-site green electricity generation and carbon sequestration from our green spaces. Once we know the shortfall, we will be able to consider how we reduce this to zero before 2050.

It should be noted that this modeling does not include any potential savings delivered by the implementation of other actions laid out within this Green Plan action and the carbon reductions that will be achieved via the implementation of tranches of actions that will be set out in the myriad Sustainability Action Plans which will be implemented between now and 2050. These Sustainable Action Plans will be refreshed every 3 months years and will contain the most up-to-date and pressing interventions that the Trust can implement to reduce carbon emissions, air pollution and waste.

5.3 Building the Brandon Medical Way

Brandon Medical has been extremely successful in developing the energy efficiency of our buildings. We will continue to use the knowledge that we have developed to ensure that changes and additions to our buildings and green spaces meet the same or higher standards, to maximise sustainability in areas such as; energy efficiency, mitigating pollution, waste segregation and recycling.

5.4 Brandon Medical as an Exemplar Institution

The Company will work collaboratively to support and progress sustainability, to help our customers, the NHS, our industry and our City. All NHS Trusts have targets to develop their own Green Plans and Carbon reduction Plans. Brandon Medical will support them by offering low carbon, low waste, low pollution products and services. Within Leeds, the Company is considered to be an exemplar company. As an "Exemplar", we are a significant organisation within the City and our activities have an impact on Leeds' ambition to become a sustainable city.

We are engaged with the Institute of Hospital Engineers & Estate Management IHEEM), the manufacturers' organisation Make UK, Medilink, Betterworld and Pledge to Net Zero. Through these groups, we meet



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with our colleague organisations to discuss new initiatives, best practice, opportunities for collaboration and how to make healthcare and business more sustainable.

6.0 Our sustainable action plan

In order to meet our carbon reduction, air pollution and waste targets, Brandon Medical has developed a comprehensive Sustainable Action Plan, which is presented in this section. The adoption and implementation of this Sustainable Action Plan will help the Company to meet its strategic objectives and overall ambition of becoming carbon neutral by 2050.

The Sustainable Action Plan is divided into 10 sections, which are: • Corporate Approach • Asset Management and Utilities • Travel and Logistics • Adaptation • Capital Projects • Greenspace and Biodiversity • Sustainable Care Models • Our People • Sustainable Use of Resources • Carbon and Greenhouse Gases

These sections have been developed to align with the UN Sustainable Development Goals (SDGs). By adopting this format into our Sustainable Action Plan we can ensure that we consider all aspects of sustainability as established by the UN framework. This Sustainable Action Plan commits the Company to a range of actions which will help move us forward on our pathway to net-zero. The Board of Directors will monitor, implement and manage the delivery of this action plan, working with our colleagues across the Company to implement the actions contained within the plan.

6.1 Corporate Approach

Senior-level staff engagement with the Green Plan is crucial to ensure that the plan is delivered throughout the organisation. Top down awareness of sustainability at the Company can ensure that the principles of sustainability become embedded within the Company's policies, procedures and systems. Management can also keep the Company accountable for reducing our emissions, air pollution, waste and delivering the wider aims of the Green Plan. Actions have been established to improve the corporate approach to sustainability at Brandon Medical. The Company will focus on improving colleague engagement, all staff will be actively encouraged to contribute information on sustainability for the Sustainability Team and the Company's annual report. Brandon Medical will provide engagement programmes which will highlight the importance of integrating social and environmental aspects at the Company and will provide training to staff to support them in implementing this. Procurement will be reviewed and improved, an accountable senior leader will be allocated to be responsible for the management of sustainable procurement and social value in the organisation. The Company will work to identify potential social, environmental and economic opportunities in procurement and shall look to extend our evaluation process for procurement to include a range of social and environmental standards such as ethical labour standards. The Company will work with our supply chain to ingrain sustainability into the procurement process and capture data so that the progress with the changes to procurement can be monitored. Engagement with stakeholders such as customers, staff and the local community will be carried out at the Company to help shape the sustainable development policy. Where possible, we will work to assist our key partners in the development of their strategies and will use these opportunities to promote sustainable development. We



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will seek to implement schemes which maximise the support given to the community and add social value in the community.

6.2 Asset Management and Utilities

Gas and electricity consumption are the second and third largest sources of Scope 1 and 2 emissions at Brandon Medical so the continual improvement in utilities management is crucial to reducing our carbon footprint and achieving our emissions targets. Use is monitored monthly to identify changes and ensure energy reduction actions are effective.

Actions to reduce the use of electricity have been approved including the introduction of 2-component lighting to allow a reduction in general lighting levels and optimisation of walkway sensor lights.

Savings in the chilling of the white room and the heating of the soak room have been identified and feasibility studies initiated to check that these do not affect air cleanliness and product reliability. Initial results are positive and changes will be made to implement the savings.

Brandon Medical installed on-site solar PV generation in 2018. The Company has commissioned a survey and identified that there is scope for a second, additional solar PV system of circa 100 kVA. Work will be done to investigate the feasibility of adding to the on-site generation capacity.

To reduce gas consumption, the Building Management System will be optimised and temperature settings reduced. A thermal camera survey of the buildings has been completed with two areas identified for improved insulation, in the assembly department and the paint preparation department. Work has started to identify the improvements that can be made and the costs of these improvements.

Energy efficiency will also be factored into design and procurement decisions in new product development, services and to ensure that buildings acquired are suitably efficient. The Company intends to utilise new technology and innovations to improve carbon performance, including potential use of smart microgrids, voltage optimisation and on-site green energy generation.

6.3 Travel and Logistics

Actions have been established to improve the sustainability of travel associated with the Company. The actions primarily focus on reducing the environmental impact of transport for materials and travel by staff, customers and suppliers by reducing the requirement for travel and by encouraging the use of greener modes of transport. The Company has outlined actions which capitalise upon suitable technologies, where practicable, to remove the necessity of customers, staff and suppliers to travel.

Substantial progress has been made in reducing the carbon embedded in our products and from manufacturing logistics. Brandon Medical's core product is made from materials with 80% local regional content (ref. Ernst Young). Where parts and materials are not available in the UK and have to be imported, they are sourced from nearby countries (predominantly Germany and Switzerland) to minimise carbon miles and to achieve high quality. New products being developed in the Company's R&D department are currently being designed with 30% less embedded carbon than current products.



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The Company has built a digital showroom with full video conference connectivity which allows products to be demonstrated to customers over remote connections, reducing their need to travel to Leeds. Brandon Medical has 2 teleconferencing rooms for virtual meetings and has provided video conferencing to all employees, which allows staff to work remotely with colleagues, customers and suppliers, reducing the requirement for staff to travel for work.

This will be coupled with the Company's Travel plan and a low-carbon travel campaign to ensure that when staff and customers are required to travel, they are aware of low-carbon options available. The Company has begun to transition its fleet to EV and Hybrid vehicles with the installation of fast chargers and the replacement of the first 4 vehicles. This will ensure that Company vehicles are compliant with the Leeds Clean Air Zone and will help to reduce the Company's contribution to local air pollution. Work is being done to analyse how people travel to Brandon Medical in order to develop a low carbon travel plan.

The Company plans to review the use of high-carbon business travel and promote greener business travel. The Trust shall also work with suppliers to assess their contribution to the Trust's environmental impact. Through additional monitoring the Trust will assess the environmental impact of our suppliers and engage with them to find appropriate solutions.

6.4 Adaptation

Climate change is considered one of the greatest threats of the 21st century. The Company recognise the importance of adaptation in order to mitigate the impact of the changing climate and to ensure that the Company can continue to deliver a high quality of service during extreme weather events.

The Company will use its ISO 13485 COTO Risk Register system to identify and assess risks to ensure that the Company plans for issues posed by climate change, both internally and externally. The Company procedures are to design mitigation measures for each risk to bring the level of risk into acceptable limits. The impacts of climate change and extreme weather events on the NHS, customers, suppliers and community will be monitored by the Company to allow strategies to be adapted to ensure effective and protections are in place.

6.5 Capital Projects

Any capital building projects can have significant environmental impacts. Any refurbishing and rebuilding parts of the estate provides the opportunity to implement new technology and more efficient design to help reduce our emissions, resource air pollution and reduce waste. The Company has made considerable progress in ensuring that the Brandon Medical estate is extremely energy efficient, with high levels of recycling and zero hazardous waste. Future focus on reducing scope 1 and scope 2 emissions will lead to further reductions in energy use and increasing on-site generation of clean energy.

6.6 Greenspace and Biodiversity

Providing greenspace and protecting biodiversity can greatly benefit the local environment by improving air quality, helping remove the carbon emitted and it also has been proven to improve wellbeing. The Company understands the value of greenspace and has established a cross functional Sustainablity Team



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to protect and enhance the natural environment of our estate. A greenspace and biodiversity strategy has been developed, and the relevant staff and the necessary resources have been allocated to successfully deliver the strategy.

The Sustainability Team has engaged with the Morley Allotment Association to help design improvements to the gardens and landscaping that surround the Brandon Medical factory. The Team has already implemented new measures to encourage wildlife diversity on site and to grow edible crops. Actions are currently in place to plant more trees to increase carbon capture and to design a recreational seating and picnic area for the wellbeing of our staff and visitors.

6.7 Sustainable Operating Models

To improve the sustainability performance of our Company it is important to improve the sustainability of all our operations, so we can continue to manufacture, install and service all our products without negative environmental, social or economic impacts. Brandon Medical has engaged with external parties to achieve systematic and professional improvements. The Company has joined the building design and construction industry scheme "Pledge to Net Zero" and set out its commitments for carbon reduction based on the industry standard science-based targets. Brandon Medical are members of Betterworld, an organisation of manufacturing companies that work together to develop and share best practice in carbon reduction. Additionally, the Company is working with The Institute of Healthcare Engineering and Estate Management and Medilink to work with industry colleagues to improve sustainability. The Company voluntarily provides public reporting of its carbon emissions and progress on the road to Net Zero in its statutory accounts.

6.8 Our People

To successfully achieve our targets and provide sustainable healthcare, staff engagement with the Green Plan is required at all levels of our organisation. We aim to work with and educate our staff so that they can reduce their emissions, carbon footprint and waste at home as well as at work. It is also extremely important that we provide a positive working environment and try to protect and improve the wellbeing of our staff.

Engagement has started by forming the Sustainability Team which includes volunteer staff from the factory, warehouse, offices and administration. The purpose of the Sustainability Team is to engage with people from across the organisation and to empower them to make changes to improve sustainability and wellbeing.

Brandon Medical is proud to be a Living Wage Employer.

The Company will also promote healthy and sustainable choices to staff. We will seek to work to improve social sustainability in the wider community by working with suppliers who promote equality, diversity and wellbeing in their workforce. We shall also work collaboratively with local partners to improve the provision of local accessible employment opportunities at the Company.



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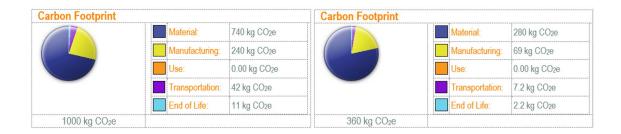


6.9 Sustainable Use of Resources

The Company has the opportunity to reduce the amount of waste we generate, our carbon emissions and air pollution by adopting a sustainable approach to managing resources. Actions have been established to help improve the sustainable use of resources at the Trust.

Brandon Medical has invested heavily in reducing the amount of energy consumed from utilities by installing a building management system to automate the control of heating, ventilation and lighting. Energy use is monitored monthly to ensure that all systems are working efficiently and that new initiatives to reduce consumption are being effective. The Company's buildings are insulated to the highest current standards and use the most efficient heating equipment and lighting systems available.

In our New Product Development process, we have started to benchmark the embedded carbon in our products and in new products we are designing to replace them at the end of their lifecycle. Brandon Medical has installed special software to measure the amount of embedded carbon in our 3D CAD designs. Reductions are being made by careful design to minimise the quantity of materials used. When we select materials, careful consideration is given to their carbon content and recyclability at end of life. Where possible and where it will not affect the quality of our products, we are considering the use of recycled materials in our new products.



Brandon Medical already has comprehensive recycling in place for waste metals, oils and cardboard. The Sustainability team has introduced additional recycling of batteries, waste paper and domestic waste from our welfare facilities. We have eliminated all single-use products from the Company welfare facilities by providing staff with re-usable items and dishwashing machines.

There is a small amount of residual waste produced that the Company cannot recycle, mainly because it is low volume. This is removed from site by a specialist re-cycling contractor who processes it at their local re-processing centre. The Sustainability Team are auditing the process to ensure that this waste is also recycled to our satisfaction.



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6.10 Carbon and Greenhouse Gases

Reducing carbon emissions and greenhouse gases requires a Company-wide approach considering every aspect of our organisation. Brandon Medical has made its public commitment to becoming Net Zero through "Pledge to Net Zero", the environmental industry's global commitment, requiring science-based targets from its signatories to tackle greenhouse gas emissions within their organisations (https://www.pledgetonetzero.org/).

This Green Plan sets out the Company's historic achievements, current and future plans to improve sustainability. These will take enable Brandon Medical to meet its 2026 targets and will go a long way towards the 2030 targets.

Brandon Medical has identified the use of process gases that are also greenhouse gases. There will be eliminated by replacing the use of Propane gas used with inductive heating technology for

eliminated its use of carbon and ozone depleting gases from its operations.

The Company recognise that hydrocarbon fuel for its fleet of cars and service vans is a major component of scope 1 emissions. Progress has already started migrating to EVs and will be accelerated over the coming years as vehicles come to the end of their leases. As the infrastructure for charging EVs improves, it will become feasible to replace those vehicles that cover long distances, particularly the service vans, with new EV versions.

The UK target for all electricity to be from 100% renewable sources is 2035. Brandon Medical will transition to using green electricity where ever it can by exploring the options to purchase renewable electricity and by increasing on-site generation. The "greening" of the UK's electricity generation and conversion to EV's will also eliminate the carbon emissions from the vehicle fleet. By 2035, the Company expects to be a net generator of green electricity, which will be used to offset remaining scope 3 emissions.

Replacing gas as a source of space and process heating is currently very challenging. There is potential to replace the small amount of gas used in manufacturing processes and it may be possible to change the combi boilers used to power the office heating and domestic hot water with air source heat pumps but there are no viable alternatives to natural gas for space heating for the factory and warehouses. The Company believe the solution will be to use hydrogen instead of natural gas as part of the H21 Leeds City Gate project. This project aims to convert the whole of Leeds (including Morley) to green hydrogen between 2029 and 2035.

In summary, the Company expects that by 2035 that it will have reduced its scope 1 and scope 2 emissions to zero by no longer be using any carbon based fuels to power its vehicle fleet, all UK electricity generation will be free from carbon and that its gas supplies will be 100% green hydrogen from H21 Leeds City Gate. Any remaining carbon will be in scope 3 emissions embedded in the manufacture of products, where we will continue to make improvements by reducing carbon miles, minimising materials used, ising recycled materials where possible and by designing for the products to be easily recycled at end of life.







7.0 Brandon Medical Net Zero Targets & Key Actions

7.1 Targets

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

These ambitious targets will not only drive towards Brandon Medical's sustainability goals but will also 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.

Brandon Medical direct energy usage targets

Brandon has plans for significant business growth over the next few years and this will clearly lead to increased energy usage. To ensure that energy performance can be clearly determined it will be measured in tonnes of emitted CO_2 per £M turnover.





CO₂ Emissions in tonnes per £M turnover:

	Gas	Diesel	Electricity*	Total
	(Scope 1)	(Scope 1)	(Scope 2)	(Scope 1+2)
2021 benchmark	9.4	13.0	4.1	26.5
2-year	8.5	11.1	3.7	23.3
target	(10% reduction)	(15% reduction)	(10% reduction)	(12% reduction)
10-year	1.9	zero	2.6	4.5
target	(80% reduction)		(37% reduction)	(83% reduction)

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

Product design - Scope 3 Emissions

Reduction in CO ₂ due to	30% reduction in CO ₂ required to produce the main
manufacturing materials by 2024	components of the Quasar range of products.
by 2024	

Ecology targets

Carbon capture	Plant six additional trees
improvements by 2023	Manage current tree stock to maximise growth where appropriate
Biodiversity improvements by 2023	Convert the majority of the 140 m ² of lawn to plants that will support pollinators and promote biodiversity.
	Install nest boxes

7.2 Green Plan Actions FY2022/2023

- 1. We will plant 6 additional trees in the 2022/23 planting season.
- 2. Scope 1 Emissions: Gas





(i) Active management of heating.

Set point has been reduced from 20C to 18C for winter 2022/2023

Duration of heating periods has been reduced

Set point for summer will be reduced to 10C to stop occasional heating in early mornings

(ii) Improve insulation

Draught sealer has been used to seal the windows in Assembly

We will look to see if we can insulate the blasting room door

A thermal survey of building has been completed to identify thermal weaknesses

3. Scope 1 Emissions: Vehicle fuel

We will analyse fuel use of each BM vehicle (User, Reg No, Make/Model, Fuel, Litres used, miles, term remaining)

We will consider feasibility of replacing each vehicle with an EV

We will set new policy to encourage EV changeover

4. Scope 3 Emissions: Electricity

White room chillers (5kVA) have been turned off following testing

Soak room heaters (9kVA) have been turned off following testing

We will change the warehouse lights from T5 to LED (50% reduction)

We will change the office lights from T5 and PLL to LED (less % saving due to controls)

We will reconsider solar PV at 2023 market electric rates

7.3 Further Initiatives to Develop

Electrification of Company vehicle fleet (diesel is a big source of Carbon).

Octopus Energy EV Scheme to encourage staff to change their private vehicles used to travel to work from internal combustion to EV

Consideration of EV chargers for non-company vehicles with metered charges



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Collect data for Scope 3 Emissions Analysis (Quantis Scope 3 Emissions Tool)

Switch to green electricity supplier. Finance Department to investigate 100% green electric suppliers and when contracts can be changed. Finding: Contract is fixed until June 2023.

Switch to green gas supplier. Finance Department to investigate 100% green gas suppliers (which they do through carbon off-sets) and when contracts can be changed. Contract lasts until Nov 2022. There isn't an opportunity to change to a "green" supplier at the moment. The H21 City Gate Project will potentially make this a waste of time/money.

Consideration of increased solar PV for the building

Consideration of smart sub-metering

Consideration of Voltage Optimisation (VO).

Graeme Hall

Exec Chairman

14th December 2022

