

PENTAX Medical | 2022

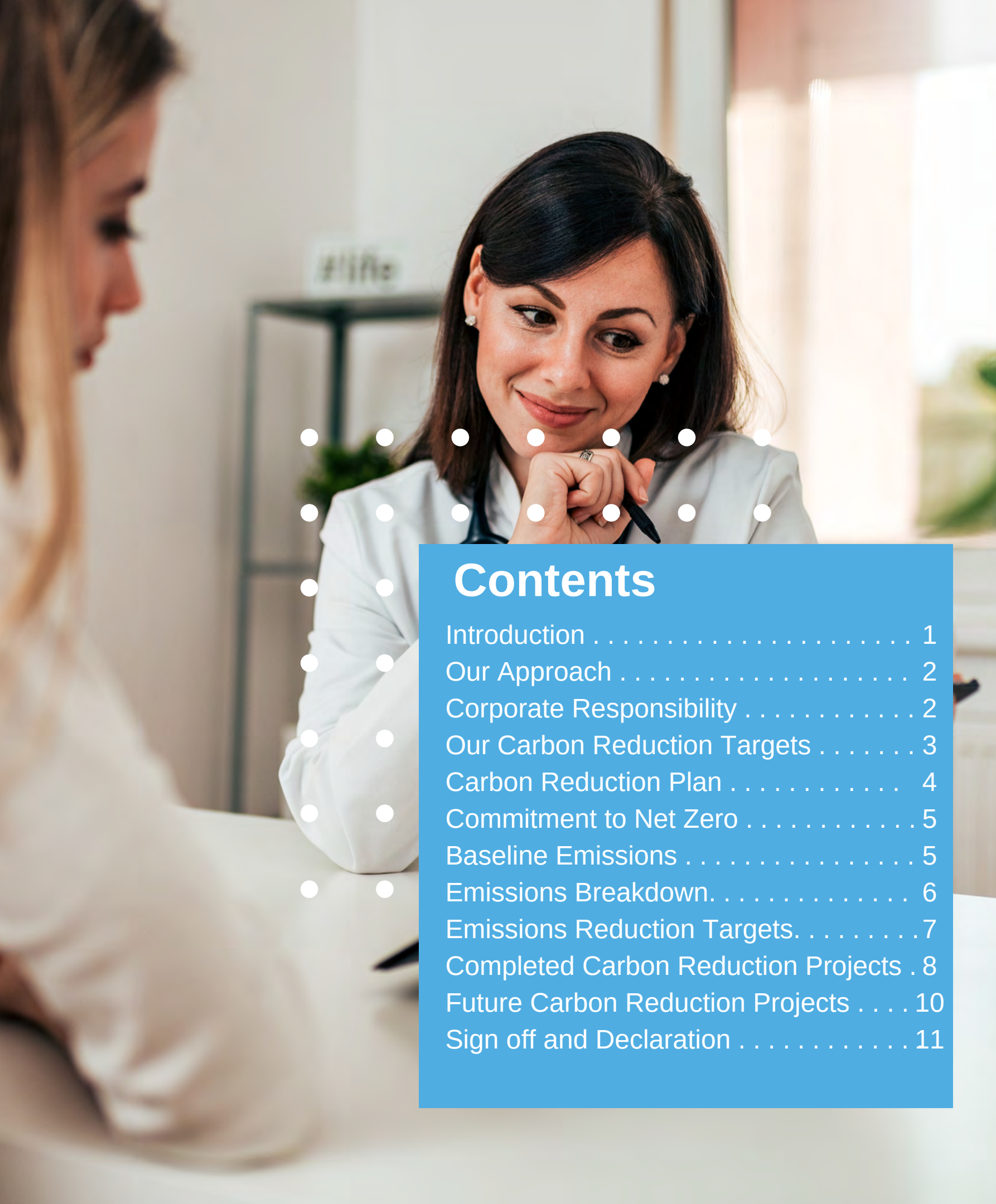
# Towards a Sustainable Future

An ambitious Carbon Reduction Plan compliant with PPN 06/21

**PENTAX**  
**MEDICAL**







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# Introduction

The latest climate science indicates that the way we live is having a negative impact on our climate. The impacts of climate change are happening now. Forest fires and droughts are common, and scientists have documented evidence that sea levels are rising. There is a consensus that unless we change, the future looks uncertain in terms of social, environmental, and economic conditions. The Paris Agreement of 2015 established a global goal of limiting global temperature rise to well below 2°C above pre-industrial levels, and pursuing efforts to limit warming to 1.5°C. In 2018, the Intergovernmental Panel on Climate Change warned that if global warming continues at its current pace, we will exceed 1.5°C, which would have catastrophic impacts on the planet.

In 2019 the UK became the first major economy to pass a Net Zero emissions law, meaning the UK government is legally required to reach Net Zero emissions by 2050. When the UK government published its procurement policy note 06/21 (PPN 06/21), it was clear that businesses should focus on building back the economy in a sustainable fashion. The requirement has broadened to encompass the NHS, which has mandated all of its vendors to submit a PPN 06/21 in alignment with the UK government goal.

“PENTAX Medical UK are very pleased to publish our Carbon Reduction Plan, making our journey to Net Zero visible to our valued partners.

We are committed to achieving this goal by 2040 in full support of the vision for a Greener NHS & Greener UK. As a global organisation, there are many initiatives in place to achieve this in the manufacturing and distribution of our technologies, as well as industry-leading R&D into sustainability solutions for Greener Endoscopy. With these innovations, we will partner with the NHS & private healthcare providers to tackle challenges within the endoscopy treatment pathways and decontamination processes ensuring our patients receive the best care with minimum environmental impact. ”



**Nigel Spring**  
Head Of Operations





## Our Approach

As a vital vendor to the NHS, we possess the capability to provide support to the NHS in achieving its Net Zero objectives. Moreover, we hold the potential to impact our suppliers positively, encouraging them to contemplate their environmental impact. We know our dedicated, passionate, and committed people can help us leave the world in a better place as we recognise that climate change is the single biggest challenge the world faces.

At PENTAX Medical, our purpose is to help improve people's lives through innovative solutions. We will use this opportunity to take climate action and create social value through our business, company culture, and strategic partnerships. Furthermore, we wish to nurture our people, protect the world we live in, and enhance the communities around us. This report demonstrates a real commitment to building a business that has a positive impact on the world.

Our business is undertaking a strategic review to ensure our carbon reduction efforts are included across the whole business, therefore we are focused on the most impactful and valuable areas and have thus set a goal to be Net Zero by 2040.

## Corporate Responsibility and Accountability

PENTAX Medical has long been dedicated to enhancing the well-being of individuals through innovative solutions. However, we are now expanding our mission. Alongside our continued efforts to elevate patient safety and improve lives, we recognize our accountability for mitigating our ecological and societal footprint.

To ensure we achieve our aims, we partnered with carbon consultancy Enistic who calculates and tracks our carbon emissions in accordance with the GHG protocol.

PENTAX Medical UK are leading the way in Endoscopy as Partners in Sustainability. We have invested in the lifecycle of the endoscope, launching transformational innovations in the decontamination, drying & storage of scopes.

Aside from our portfolio of innovations, we have taken steps to reduce the need for bottled sterile water in endoscopy. Plastic bottles of water carry a significant impact in their production, transport, storage and disposal. As the first supplier to address the global standard guides which require these bottles, our UK customers can confidently take the decision to make this improvement in their service with our full support in implementing sustainable alternatives.





# Our Carbon Reduction Targets

PENTAX Medical is committed to a 100% reduction in all scope 1, 2, and 3 emissions by 2040.



All our emissions reductions will be primarily achieved through ambitious carbon reduction projects and offsetting carbon emissions will only be considered in cases of unavoidable emissions. PENTAX Medical will work with its partners to establish a yearly emission reduction target and this KPI will be integrated into our reporting system to ensure annual targets are met.

## Emissions Categories

Currently, we measure all our scope 1 and scope 2 emissions following the GHG protocol, and we measure a subset of scope 3 emissions (PPN 06/21 requirement) following the Corporate Value Chain Scope 3 Standard.

GHG Scope	Emissions sources
Scope 1	Direct emissions resulting from sources that are owned and controlled by PENTAX Medical
Scope 2	Indirect emissions from purchase of electricity and onsite EV charging
Scope 3	Indirect emissions from other sources not included in Scope 1 and 2 categories





# PENTAX Medical Carbon Reduction Plan - in accordance with requirements for PPN 06/21



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# Commitment to Net Zero

PENTAX Medical is committing to becoming Net Zero by 2040. Our carbon reduction goals align with the IPCC’s carbon reduction roadmap.

This report sets out a Net Zero roadmap, detailing the strategies we have put in place to achieve this goal.

## Baseline Emissions

Baseline emissions are a record of the greenhouse gases that have been produced in the past - before introducing any strategies to reduce emissions – and are the reference point against which emission reductions can be measured.

2022 was the first year where we had a complete GHG inventory, required for PPN 06/21 compliance. PENTAX Medical has not previously baselined emissions, therefore, this reporting year will be the baseline. Reasonable assumptions are made in calculating the scope 3 emissions for this period.

Baseline year emissions: January 2022 - December 2022	
Emissions	TOTAL (tCO2e)
Scope 1	52
Scope 2	29
Scope 3 (Including Sources)	782
Total Emissions	866

## Baseline Year Calculation Assumptions

As part of category 7 employee commuting, we have included working from home data to give a better view of our total emissions.

To calculate the commuting and working from home emissions we sent a survey to our staff. We did this for one and to cover the whole period we extrapolated this data.





# Emissions Breakdown

Scope 1	Emissions TOTAL (tCO2e)
1: Company-Owned Vehicles	52
Total Emissions Scope 1	52

Scope 2	Emissions TOTAL (tCO2e)
2: Energy – Electricity	29
Total Emissions Scope 2	29

Scope 3	Emissions TOTAL (tCO2e)
3.04: Deliveries (Upstream)	202
3.05: Waste generated in operations	0.2
3.06: Business Travel	103
3.07: Commuting and Home-working	22
3.09: Deliveries (Downstream)	477
Total Emissions Scope 3	804

Total Emissions	886 tCO2e
Intensity Ratio	0.11 tCO2e per sqft



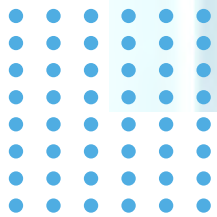


# Emission Reduction Targets

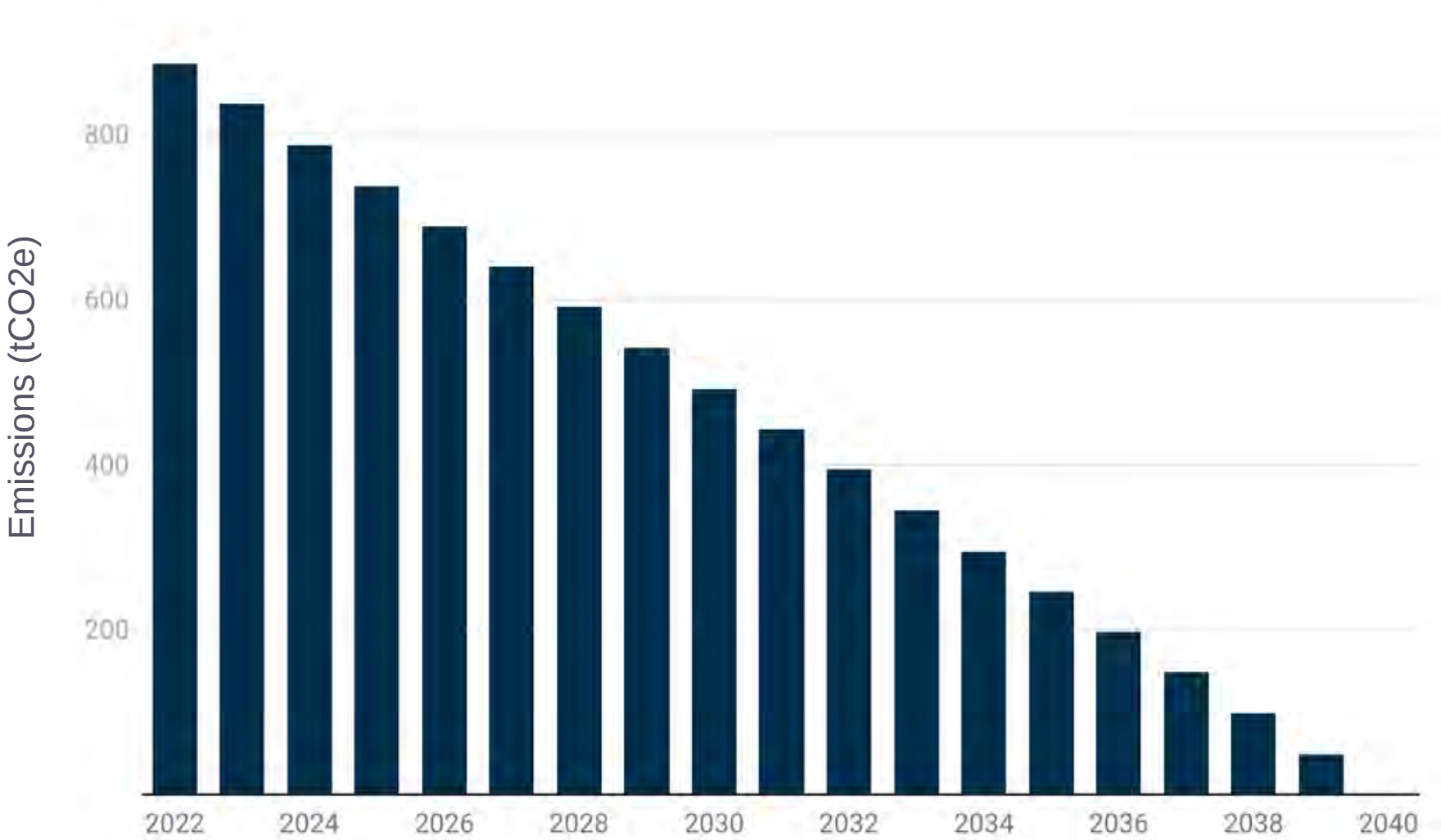
To continue our progress towards achieving Net Zero, we have developed a Net Zero target for 2040.

We project an absolute linear reduction in our emissions from our baseline year to Net Zero emissions by 2040. These targets may change as new projects are implemented. Prior to our baseline year, we tracked scope 1 and 2 emissions.

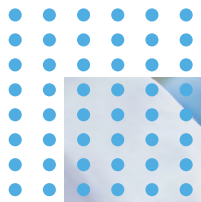
The graph on the right depicts our projected vs targeted emissions. Starting with our emissions from the baseline year (2022), the projected bar shows our potential emissions as we introduce carbon reduction plans. The grey bar shows our target carbon emissions based on our 2040 Net Zero target. As you can see, we are currently on track to reach our target.



2040 Net Zero Target: Projected vs Target



Year	2022	2023	2025
Projected	886	837	788





# Completed Carbon Reduction Projects

The following environmental management measures and projects have been completed or implemented before the 2022 baseline.

## PlasmaTyphoon+

PlasmaTyphoon+ replaces legacy drying cabinet technology with a fast, efficient, complete drying process which consumes a fraction of the electricity, leading to a significant reduction in carbon footprint. The work of several drying cabinets can be managed with a single PlasmaTyphoon+ allowing expanding demand to be managed within your existing decon facility.

## PlasmaBag

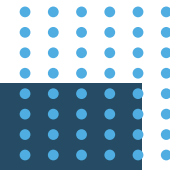
PlasmaBag is a zero energy storage option, comprising of a single recycled bag, which can replace high energy storage cabinets, or multi-layer plastic bag storage systems.

## D60 UV-C Cabinet

This is an elegant solution for the decontamination of channel-less endoscopes, eliminating entirely the water and chemicals traditionally used in the decon process. Decontaminating a scope in just 60 seconds, it is best situated in the clinical space to remove workload from decon altogether, potentially even reducing the number of scopes required to run a service.

## DEC Duodenoscope

This product addresses the need that came from increased infections linked to improper cleaning of a duodenoscopes elevator mechanism. While the market trend was to develop single-use, disposable scopes, PENTAX Medical opted to enhance the cleaning capability of a majority reusable scope, limiting the single-use aspect to just the Disposable Elevator Cap (DECTM)





# Completed Carbon Reduction Projects

We aim to implement the following carbon reduction projects to reach our emission goals.

## LED Lighting

We have switched all of our lighting to LEDs this has been an effective way to reduce our energy consumption and overall environmental impact. LED lighting is more energy-efficient than traditional incandescent or fluorescent bulbs, which means that it uses less energy to produce the same amount of light. This results in lower electricity bills, as well as a reduced carbon footprint.

LED lighting also lasts longer than traditional lighting, which means that we have saved on replacement costs over time. Furthermore, LED lights do not contain hazardous materials like mercury, making them more environmentally friendly and easier to dispose of.

## PIR sensors

In addition to LEDs, we have installed PIR (passive infrared) sensors on all of the lights to further improve our company's energy efficiency and reduce our environmental impact. PIR sensors detect motion and automatically turn lights on and off, which means that energy is not wasted when the room is empty.

Additionally, using PIR sensors has extended the lifespan of our lighting systems, as they will be used less frequently, resulting in cost savings on maintenance and replacement.

## Time-controlling Measures

We identified that our lighting, heating and screens were running during periods when no one was using them. This was significant as unnecessary energy usage is one of the largest contributors to environmental degradation, and we recognised that reducing it would help to mitigate our impact.

Therefore, we implemented time-controlling measures to effectively improve our energy efficiency. By setting specific times to turn it on and off, you can ensure that energy is not being wasted when it's not needed.

## Paperless office

We have helped streamline our operations by transitioning to a paperless office. By eliminating paper usage, we have reduced our carbon footprint, saved trees and other natural resources, and decreased the amount of waste our company generates. Additionally, going paperless can lead to cost savings on printing, storage, and other related expenses.

## Waste recycling

As a company, we have taken steps to increase the volume of waste that we recycle, as part of our efforts to reduce our environmental footprint and uphold our commitment to sustainable business practices.





# Future Carbon Reduction Projects

We aim to implement the following carbon reduction projects to reach our emission goals.

## Phased Implementation of EV Fleet

We have developed a comprehensive plan to introduce electric vehicles (EVs) into our car fleet over the next few years. The phased implementation of EVs will allow us to effectively manage associated costs while ensuring that the necessary infrastructure is properly sized to meet the needs of our employees and visitors. By transitioning to EVs, we will be able to reduce our carbon footprint by 52 tCO<sub>2</sub>e, as EVs produce zero carbon emissions.

## Training for drivers

To support our implementation of EVs, we are providing training for our drivers so they can adopt more sustainable driving practices. This will not only have an impact on our future EV fleet but will aid in reducing our company's carbon footprint and saving on fuel costs for our existing fleet.

## Collaborating with Landlord

We aim to work with our landlord to implement sustainability initiatives for the building. What follows is a brief overview of the steps we intend to take:

- Assess the current situation: We will start by assessing the current state of the building in terms of energy efficiency, water usage, waste management, and other factors. This will help identify areas where improvements can be made and prioritised.
- Research sustainability initiatives: We will work with Enistic to help research the different sustainability initiatives that can be put in place.
- Develop a plan: Once we have identified the most important initiatives, we will work with our landlord to agree on a timeline and budget to implement the initiatives.

## EV Logistics Providers

We will review our logistics provider to identify opportunities to transition to a provider with an EV fleet. By making this strategic shift, we will significantly reduce our carbon footprint and demonstrate our leadership in promoting sustainable transportation practices.





# Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans. Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.

Scope 1 and Scope 2 emissions have been reported in accordance with the Streamlined Energy and Carbon Reporting (SECR) requirements, and the subset of Scope 3 emissions have been reported in accordance with the published standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard.

This Carbon Reduction Plan has been reviewed and signed off by the Board of Directors for PENTAX Medical.

Signed

*F. Roche*

Position

Managing Director

Date

31/03/2023

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