

# 2025 SUSTAINABILITY REPORT

**PENTAX<sup>®</sup>**  
MEDICAL





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# Editorial Information

## Sustainability Report 2025

Publication date: September 2025

This report primarily covers **fiscal year 2024** (April 1, 2024 – March 31, 2025), with selected references to earlier activities. As this report has been prepared during fiscal year 2025, a period in which many new ESG initiatives are underway, it may occasionally include references to developments from FY25. Where this is the case, we have aimed to clearly indicate it.

In addition to this report, we regularly update our **Sustainability & ESG website** to ensure timely disclosure of progress and initiatives.

While we are proud of the achievements already made in FY24, we also recognize the road ahead. This report is not a conclusion, but rather the **first chapter of a longer journey toward** embedding sustainability and ESG into everything we do.

The same applies to the data disclosed in this report. Some indicators - such as training and compliance data - are highly accurate, while others, such as Scope 3 emissions, are based on best available estimates at this stage. During FY25, we are strengthening our data collection processes with the ambition of improving quality and depth year by year.

## Reference Guidelines

When defining the scope and content of this report, we considered **internationally recognized frameworks**, including:

- The United Nations Sustainable Development Goals (SDGs)
- The Ten Principles of the United Nations Global Compact
- ISO 26000 Guidance on Social Responsibility
- Global Reporting Initiative (GRI) Standards

## Disclaimer

Some of the products shown in this report may not be approved or available in all countries. Their use is subject to local laws, regulatory approvals, and applicable medical guidelines. Before use, it is the responsibility of the user to verify that the product is approved in the respective region and may be used in accordance with current medical guidelines. Any use outside the approved indications (“off-label use”) is not intended or endorsed by PENTAX Medical. The reference to products in this sustainability report is made solely for the purpose of ESG and sustainability reporting. **This report is explicitly not a marketing or promotional document.**

## Contact

For questions or feedback regarding this report, please contact us at: **[esg-global@pentaxmedical.com](mailto:esg-global@pentaxmedical.com)**.



# GENERAL INFORMATION





# Message from Management CEO



*Dom Vincent, PENTAX Medical Global President*



At PENTAX Medical, **our mission is to empower healthcare professionals with intuitive flexible endoscopy solutions for better patient care.** In today's world, delivering better care also means taking responsibility for the planet and society.

This is why we are publishing our first **Sustainability Report**. It reflects our commitment to transparency, accountability, and continuous improvement to address Environmental, Social, and Governance (ESG) challenges.

More than ever, our customers are seeking partners who can help them meet their own sustainability goals while providing the best level of care to their patients and managing cost pressure. Whether it's reducing carbon emissions, improving supply chain transparency, or advancing equal opportunities and fair workplaces, **we want to be that reliable partner.**

This report **highlights our progress** in FY24 and **outlines the actions** we are taking today to build a more sustainable tomorrow. It is part of our broader transformation to **embed ESG** into every aspect of our business – from product design and manufacturing to employee engagement and global partnerships.



# Message from Global ESG Team Coordinator



*Christian Wagner, Global ESG Team Coordinator*



Sustainability at PENTAX Medical is not the responsibility of a single department – it is a shared commitment across our entire organization. From R&D and manufacturing to sales, service, and administration, every team plays a role in shaping our ESG journey.

Over the past years, we've seen a growing desire across all regions and departments to contribute to sustainability. But the topic is complex. It took time to understand the full scope of customer expectations, regulatory requirements, and global ESG goals – and to translate them into a structured, actionable framework.

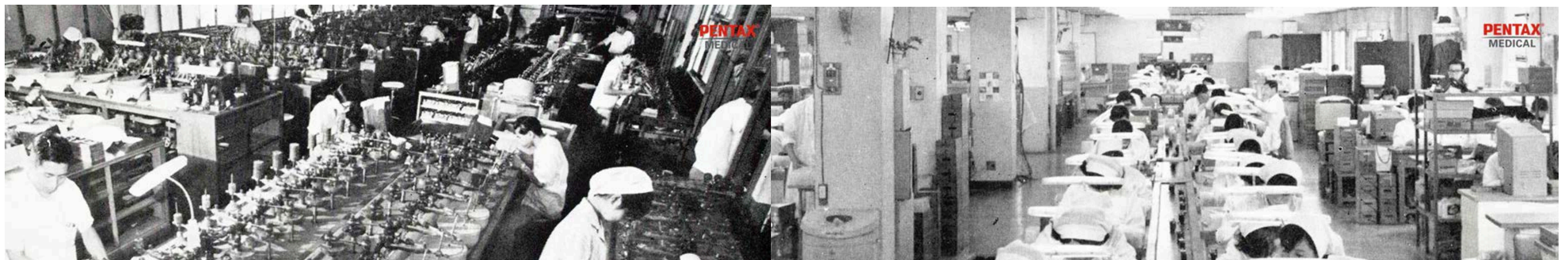
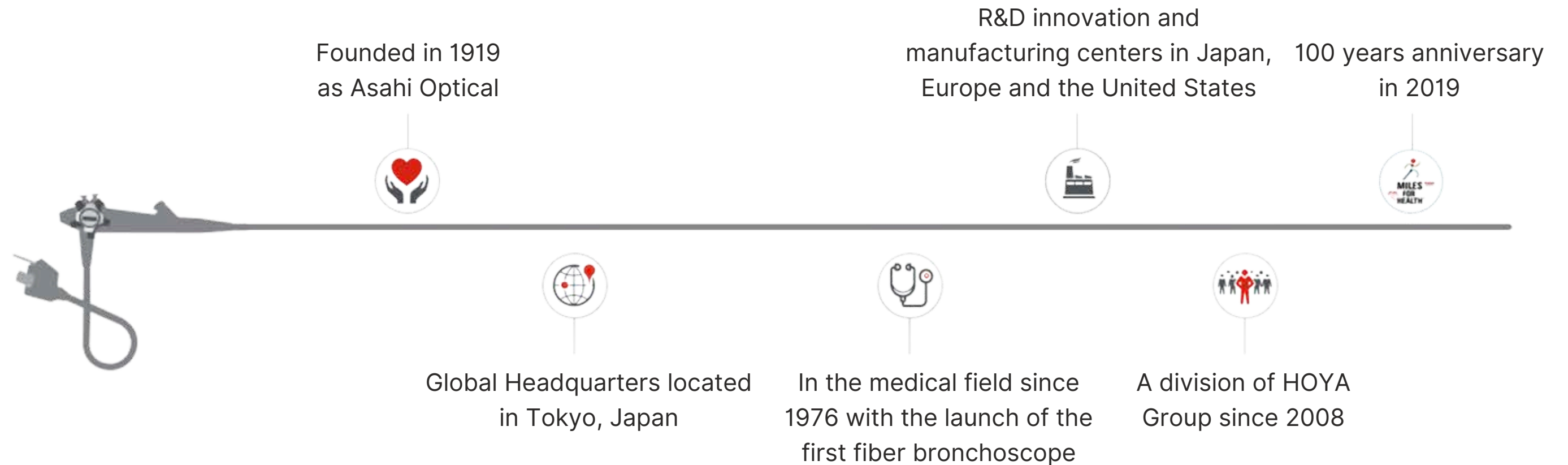
**Today, we are proud of the progress we've made.** Our ESG Management System is helping us align our efforts, track our impact, and communicate transparently. This Sustainability Report is a milestone – the first of many steps to share our journey and demonstrate how we're evolving.

We learn every day. We improve every day. What makes this work special is the opportunity to grow together as a company, to share knowledge across teams, and to see how sustainability becomes part of our daily thinking.



# PENTAX MEDICAL

## Our History: A Long Optical Tradition



*Pictures: Courtesy of Ricoh Imaging Company Ltd.*



# Certified Commitment



We are proud to demonstrate our dedication to sustainable operations through internationally recognized certifications and ESG ratings.



### Environmental Management – ISO 14001:2015

Our facilities in Japan have achieved ISO 14001:2015 certification, reflecting our commitment to reducing environmental impact while maintaining high product quality. We are actively working to expand this certification across our global operations to ensure consistent environmental management and regulatory compliance.



### ESG Ratings and Progress

**EcoVadis Sustainability Assessment:** In FY24, our France operations earned the EcoVadis Silver Label with a score of 65/100, reflecting solid sustainability performance. The 2025 results show clear progress — with an improved score of 72, placing us in the top 15% of rated companies. We’re now working to expand these assessments globally, embedding sustainability deeper into our supply chain and governance.



**LEARN MORE** ISO Certification

Source: ISO-Certification-status\_2025May.pdf

PENTAX Medical, a subsidiary of HOYA, is proud of its joint efforts and awards in the field of ESG



### MSCI ESG Rating

AAA – the highest rating, maintained for two consecutive years



### Sustainalytics

Low ESG risk rating, indicating strong risk management



### CDP Climate Change

B score – an improvement from the previous year’s C rating, showing progress in climate-related actions



# Double Materiality



In 2024, PENTAX Medical carried out its first **Double Materiality Assessment (DMA)** in line with the requirements of the **Corporate Sustainability Reporting Directive (CSRD)** and the **European Sustainability Reporting Standards (ESRS)**. The assessment ensures that our sustainability reporting addresses both the **impact of our activities on society and the environment** and the **financial relevance of sustainability factors for our business**.

Our assessment confirmed that PENTAX Medical's sustainability priorities are strongly influenced by our position as a manufacturer focused on **reusable medical devices**. While our portfolio also includes selected single-use products, such as single-use bronchoscopes, the environmental and clinical value of reusable endoscopes makes them the main focus of our sustainability considerations. Unlike single-use alternatives, reusable endoscopes can only deliver their benefits if they are **reprocessed safely and efficiently**. As a result, reprocessing, repair, and service emerged as central topics, alongside climate, energy, and responsible supply chain management.

The results of the DMA guide our sustainability roadmap, ensuring that our disclosures cover all topics deemed material under either **impact** or **financial materiality**. These insights also provide the basis for integrating sustainability deeper into product development, operations, and collaboration with customers.



# Double Materiality

Environmental

Social

Governance

Environment (E)	Social (S)	Governance (G)
E1 – Climate change: Climate change mitigation & energy efficiency	S1 – Own workforce: Employee health, safety & well-being	G1 – Business conduct: Product quality, safety & compliance
E2 – Pollution: Water management in reprocessing	S1 – Own workforce: Fair opportunities	G1 – Business conduct: Business ethics & anti-corruption
E2/E3 – Pollution & Water: Environmental impact of cleaning, disinfection & drying technologies	S2 – Workers in the value chain: Human rights in the supply chain	G1 – Business conduct: Transparency in ESG reporting
E5 – Resource use & circular economy: Resource use, circular economy & waste reduction	S4 – Consumers & end-users: Protection of patients and healthcare workers in reprocessing workflows	G1 – Business conduct: Responsible supply chain governance
E5 – Circular economy: Product design for longevity and reusability	S4 – Consumers & end-users: Data privacy & information security	



Building on these **Material Topics**, we defined **our 12 Long-Term ESG Goals**. These goals translate the outcomes of the DMA into concrete, measurable ambitions that guide our actions across the value chain and ensure accountability towards our stakeholders.



# Long-Term ESG Goals

## Sustainable endoscopy for a healthier future

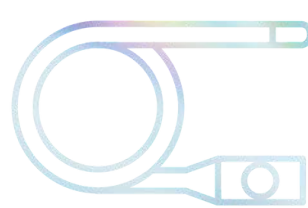
Environmental



**Company**  
Strive to be a highly sustainable company.



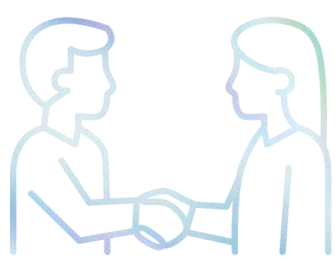
Social



**Products**  
Develop clinically relevant and safe products.



Governance



**Workplace & Society**  
Provide a healthy and fulfilling workplace & support society.





# Long-Term ESG Goals



12 goals

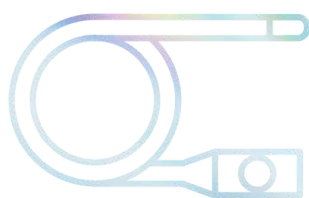
Environmental



## Company

Strive to be a highly sustainable company.

- 1. Certification by all relevant ESG rating agencies
- 2. Achieve carbon neutrality
- 3. Strengthen compliance and ethics programs
- 4. Enhance supply chain transparency and sustainability



## Products

Develop clinically relevant and safe products.

- 5. Increase use of sustainable materials and processes
- 6. Enhance environmentally friendly repair processes
- 7. Support customers in achieving their ESG goals
- 8. Contribute to more patient safety, good health and well-being



## Workplace & Society

Provide a healthy and fulfilling workplace & support society.

- 9. Ensure safe and healthy workplace for all employees
- 10. Ensure fair opportunities for all employees
- 11. Enhance employee development and retention
- 12. Improve healthcare access

Social

Governance



# Long-Term ESG Goals

## Actions Company

*Strive to be a highly sustainable company*



### 1 Certification by all relevant ESG rating agencies

- Seek **certification** from leading ESG rating agencies such as MSCI and Ecovadis
- Obtain **ISO 14001** certificate for all relevant branches
- Conduct **CSRD assessment** and improve results

### 2 Achieve carbon neutrality

- Transition to **100%** renewable energy sources by 2040, with **60% by 2030** as part of RE100 (Scope 1 and 2)
- Implement **energy-efficient technologies** across all facilities by 2030
- Calculate and **reduce Scope 3** emissions

### 3 Strengthen compliance and ethics program

- Conduct comprehensive compliance and ESG **training** program
- Improve **awareness** of helpline processes to ensure safe reporting of unethical practices
- Regularly review and update of compliance **policies**

### 4 Enhance supply chain transparency and sustainability

- Implement a comprehensive **supplier Code of Conduct**
- Conduct **regular audits** and assessments of suppliers in regards of human rights and sustainability
- Provide **training and support for suppliers** to meet standards



# Long-Term ESG Goals

## Actions Products

*Develop clinically relevant and safe products*



- 5 Increase use of sustainable materials and processes**
- Develop a sustainable **product design framework** by 2026
  - Launch new products with **sustainable materials** and **processes** by 2026
  - Receive **Sustainable Product Seals**

- 7 Support customers in achieving their ESG goals**
- Develop and offer products that help **customers reduce their environmental impact**
  - Foster **TripleAim** and **ESG** approach
  - Share **carbon footprint** of our products

- 6 Enhance environmentally friendly repair processes**
- Enhance processes for the **reuse** and **recycling** of spare parts
  - **Reduction** of **waste** through more efficient repair methods
  - **Reducing** the use of **chemicals** in reprocessing
  - Increase the **recycling** rate of **spare parts**

- 8 Contribute to more patient safety, good health and well-being**
- Develop and promote more sustainable **cleaning products** for endoscopes
  - **Train healthcare professionals** on the proper use and maintenance of endoscopes
  - Support **training** of **young HCPs** by partnering with medical schools and healthcare institutions to provide trainings
  - Design **ergonomical scopes** to improve patient outcomes



# Long-Term ESG Goals

## Actions Workplace & Society

*Provide a healthy and fulfilling workplace and support society*



- 9 Ensure safe and healthy workplace for all employees**
- Maintain comprehensive **workplace safety programs** and regular training sessions
  - Conduct regular **health** and **safety audits** and **risk assessments**
  - Promote employee well-being through **health** and **mental health program**

- 10 Ensure fair opportunities for all employees**
- Aim to promote **balanced gender representation** in management
  - Give 100% of male employees the opportunity to take **parental leave** by 2026
  - Provide **training** on diversity, equity and inclusion; provide Anti-Harassment Training

- 11 Enhance employee development and retention**
- Provide continuous learning and development opportunities, targeting a minimum number of **training hours per employee** annually
  - Implement programs to monitor and reduce employee **turnover rates**
  - Foster a culture of engagement through regular **feedback** and **career development plans**

- 12 Improve healthcare access**
- Partner with NGOs and governments to distribute products in **underserved regions**
  - Provide **training** and **support** for **healthcare professionals** in these areas
  - Develop **affordable product lines** specifically for low-income markets



# ESG Strategy



At PENTAX Medical, sustainability is not a side initiative – it is a strategic transformation embedded in our core business. In 2024, we published our **first Code of Sustainability**, which was updated in April 2025 to reflect our evolving priorities, progress, and stakeholder expectations. Our ESG Strategy is built on a **clear governance structure** and a shared commitment across all departments and regions. It is guided by our **ESG Management System**, which ensures accountability, transparency, and continuous improvement.

**Our approach to sustainability is based on three core principles:**



## **Responsibility**

We aim to reduce our environmental footprint and promote ethical business practices.



## **Collaboration**

We work with customers, suppliers, and partners to drive shared impact.



## **Innovation**

We develop solutions that meet both clinical and sustainability goals.



**LEARN MORE**

**Code of Sustainability**

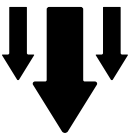
The strategy is **aligned with the United Nations Sustainable Development Goals** (SDGs) and includes **clear accountability models** and **performance indicators**. Our organizational chart defines ESG responsibilities at global, regional, and functional levels, ensuring that sustainability is integrated into decision-making processes.



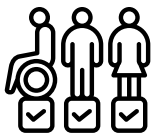
# ESG Strategy



## Key ESG goals and initiatives include:



**Reducing Scope 1, 2, and 3 emissions** through a global company carbon reduction plan and product lifecycle assessments



**Promoting fair opportunities** for our employees across all regions



**Enhancing supply chain transparency** and human rights due diligence



**Supporting hospitals** in achieving their own sustainability goals through innovative technologies

Our **current ESG performance** is tracked through internal KPIs and external benchmarks such as **EcoVadis**, where we achieved a **Silver rating** in France in 2024 and are preparing for a global assessment in 2025.

By **aligning our ESG strategy with our company mission** – to empower healthcare professionals for better patient care – we are not only improving our own impact, but also helping our customers meet their sustainability targets.

This report marks a new chapter in our journey. It reflects our progress in FY2024 and outlines the actions we are taking today to build a more sustainable tomorrow.





# Dedicated to Expanding our Knowledge in Sustainability



Recognizing sustainability as an emerging focus in endoscopy, we're actively seeking **partnerships with academic institutions** to develop innovative solutions.

Our pilot collaboration with **Switzerland's Sustainability Management School (SUMAS)** is a good example of this approach. In May 2024, students from SUMAS presented their inspiring ideas at our office in Italy, sharing how they would suggest to enhance our operational sustainability.

Building on this positive experience, we plan to **expand our partnerships with additional universities** to expand our knowledge base and continue learning from the latest research in sustainability. By fostering these partnership, we aim to develop new strategies and solutions that can further enhance our sustainability efforts.

These commitments represent the **first steps** in our commitment to improving environmental performance and implementing innovative practices across our operations.



# ENVIRONMENTAL



# Environmental Policy

## Establishment of Environmental Policy – April 2025

In April 2025, PENTAX Medical launched its first formal **Environmental Policy**, marking a milestone in our sustainability journey. The policy provides a clear framework for integrating environmental responsibility across global operations, product development, supply chain management, and corporate culture.



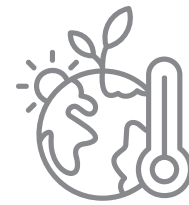
## Key Highlights and Introduced Changes

- **Strategic Alignment:** The policy aligns with established global frameworks including the SDGs, CSRD, GHG Protocol, GRI, TCFD, and the European Green Deal.
- **ESG Data Platform:** In FY25, we plan to roll out a holistic ESG software platform to streamline data collection for CSRD reporting, carbon accounting, and GHG emissions tracking (Scopes 1, 2, and 3). This will also support the development of a company-wide Carbon Reduction Plan.
- **Product-Level Carbon Footprinting:** In FY25, we plan to calculate the carbon footprint of our 50 most relevant products to support data-driven innovation and transparent communication with customers.
- **Continuous Improvement:** The policy is a living document, reviewed regularly to reflect scientific developments, stakeholder expectations, and regulatory changes.

**>> LEARN MORE** Environmental Policy



# Environmental Commitments



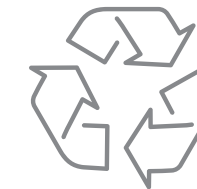
## Climate Action

Life cycle assessments and supplier collaboration to reduce emissions across the value chain



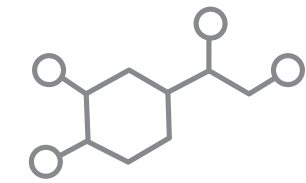
## Water Stewardship

Efficiency improvements and water recycling in operations and product reprocessing



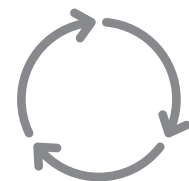
## Waste & Pollution Prevention

WEEE-compliant e-waste handling, process optimization, and pollution control



## Chemical Management

Safer substance substitution, supplier transparency, and rigorous compliance



## Sustainable Design

Integration of life cycle thinking, eIFUs to reduce paper waste, and green logistics



## Employee Engagement

Mandatory environmental training and empowerment to drive local initiatives



## Sustainable Procurement

Supplier codes and assessments to ensure ethical and environmental alignment



## Governance & Oversight

The policy is embedded into our corporate governance structure, supported by ISO 14001-certified EMS, internal audits, and performance reviews



# Renewable Electricity Our Pathway to 2040

## Why Renewable Energy Matters

For a medical technology company like PENTAX Medical, energy is more than a cost factor - it touches our responsibility to patients, caregivers, and society. Powering our manufacturing, R&D, service, and offices with renewable electricity reduces greenhouse gas emissions, supports public health, and strengthens resilience against volatile energy markets. It also helps decarbonize supply chains, so that today's innovations do not compromise the well-being of future generations.

## What is RE100?

RE100 is a global corporate initiative led by Climate Group in partnership with CDP that brings together companies committed to 100% renewable electricity. Participation provides a recognized framework, public accountability, and a strong market signal that helps scale renewable supply and accelerate grid decarbonization.

## Our Ambition (PENTAX Medical)

Since 2023, PENTAX Medical has been a member of **RE100 via the HOYA Group**. This commitment applies to all **global entities - production sites and offices**. We do not limit reporting to selected subsidiaries; progress is managed and viewed holistically across regions and functions.

Our targets are clear: **60% renewable electricity by 2030 and 100% by 2040**. We follow "Efficiency first - Renewables next":

- **First** we reduce demand in manufacturing, R&D, service, and offices.
- **Then** we source the remaining load from renewables (credible EACs, long-term PPAs, and - where viable - on-site generation such as PV).



*Roadmap to 60% by 2030 and 100% by 2040.*

In parallel, we aim to **reduce total energy consumption by 1% per year**. Because production is expected to grow, our real goal is to **continuously lower the energy used per product manufactured**.



**LEARN MORE**

**RE100**



# Renewable Electricity Our Pathway to 2040

## Our Approach

We are taking a **gradual and cost-conscious pathway** toward 2030:

- Start with modest increases and **build momentum year by year**.
- Strengthen our data foundation and **monitor local renewable market trends** to make strategic annual decisions.
- Keep a close eye on costs; **any additional renewable premiums should not burden customers**.
- FY24 focus: **incorporate all entities** worldwide to establish a complete baseline.
- From FY25, with the **implementation of a holistic ESG management tool**, we can **define targeted measures** that directly support RE100 delivery.

## Annual Renewable Plan (Iterative Cycle)

- **Assess** site load profiles, efficiency levers, and local market options
- **Define** measures and accountabilities
- **Execute** efficiency upgrades and renewable sourcing (EACs / PPAs / on-site)
- **Monitor & learn**, then **feed improvements** into the next cycle

## Challenges and Opportunities

A significant share of manufacturing is in Japan, where renewable availability and pricing can be challenging. This raises planning complexity but **does not change our trajectory**. Depending on local conditions, we will combine **certified green electricity, long-term PPAs**, and - where feasible - **on-site generation** to stay on track with our RE100 targets.



# Renewable Electricity Our Pathway to 2040



*Tomoko Nagakawa, HOYA Chief Sustainability Officer*



The replacement with energy-saving equipment and the introduction of solar panels at manufacturing sites are accelerating, while the renewable-energy usage rate is steadily increasing. Awareness of decarbonization is growing within the Company, and initiatives driven by the front lines, such as reviewing packaging materials and reducing product weight are becoming more noticeable. Building on such activities, we will continue to promote decarbonization from various perspectives.



# Greenhouse Gas (GHG) Emissions Reporting

## Introduction

For the first time, PENTAX Medical is reporting GHG emissions across Scope 1, Scope 2, and selected Scope 3 categories in alignment with the GHG Protocol. This is an important milestone on our sustainability journey - and a highly complex task that requires significant effort, resources, and collaboration across our global organization. **But what does Scope 1, Scope 2 and Scope 3 actually mean?**

### | Carbon accounting methodology

#### Scope 1 | Direct emissions

GHG emissions generated directly by the organization and its activities.

**Examples:** combustion of fossil fuels, refrigerant leaks, etc.

#### Scope 2 | Indirect emissions related to energy consumption

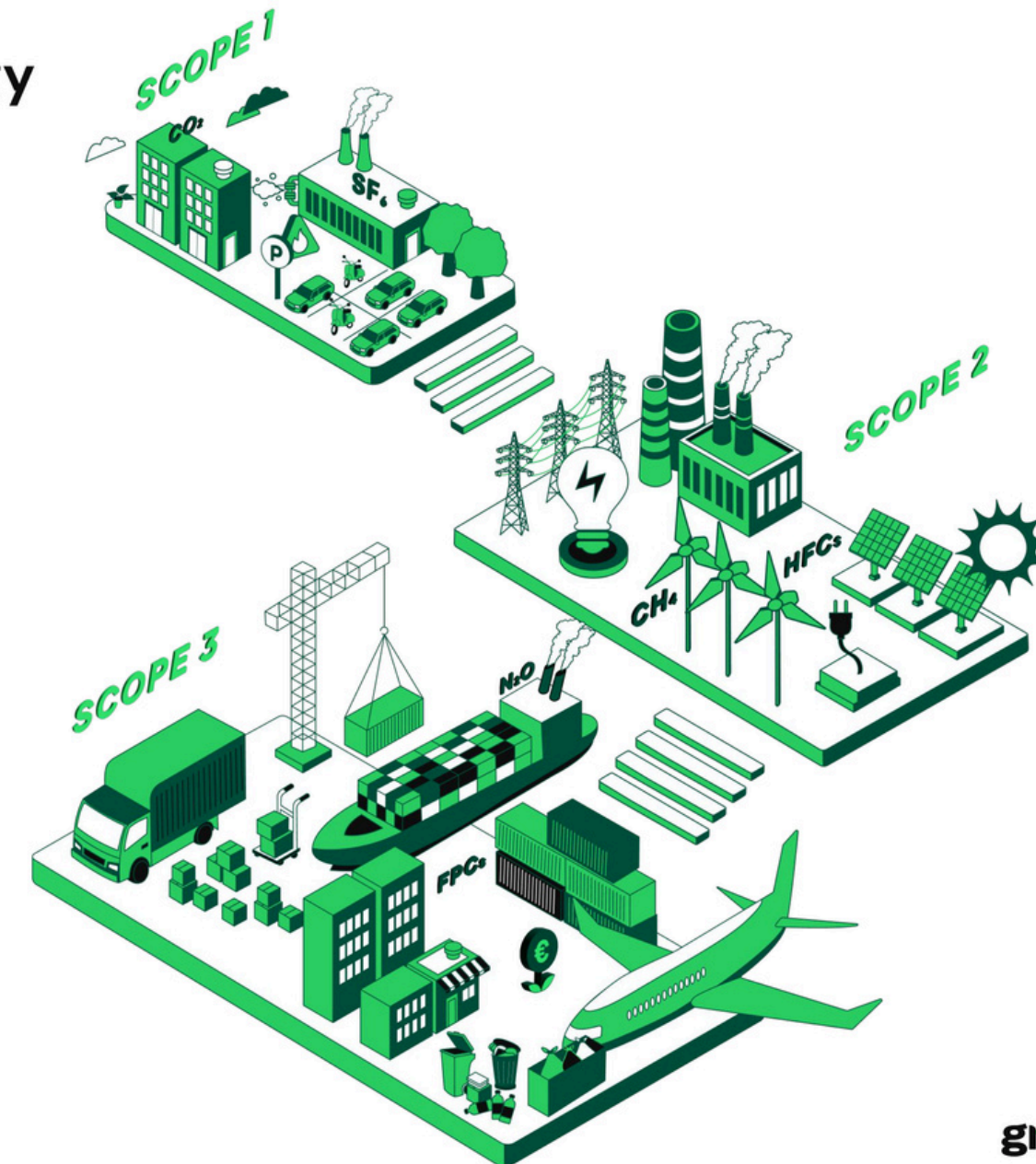
Emissions related to the organization's consumption of electricity, heat or steam.

**Example:** electricity consumption, etc.

#### Scope 3 | Other indirect emissions

Emissions related to the organization's upstream and downstream operations and activities

**Example:** transportation, purchased goods and services, sold products, etc.

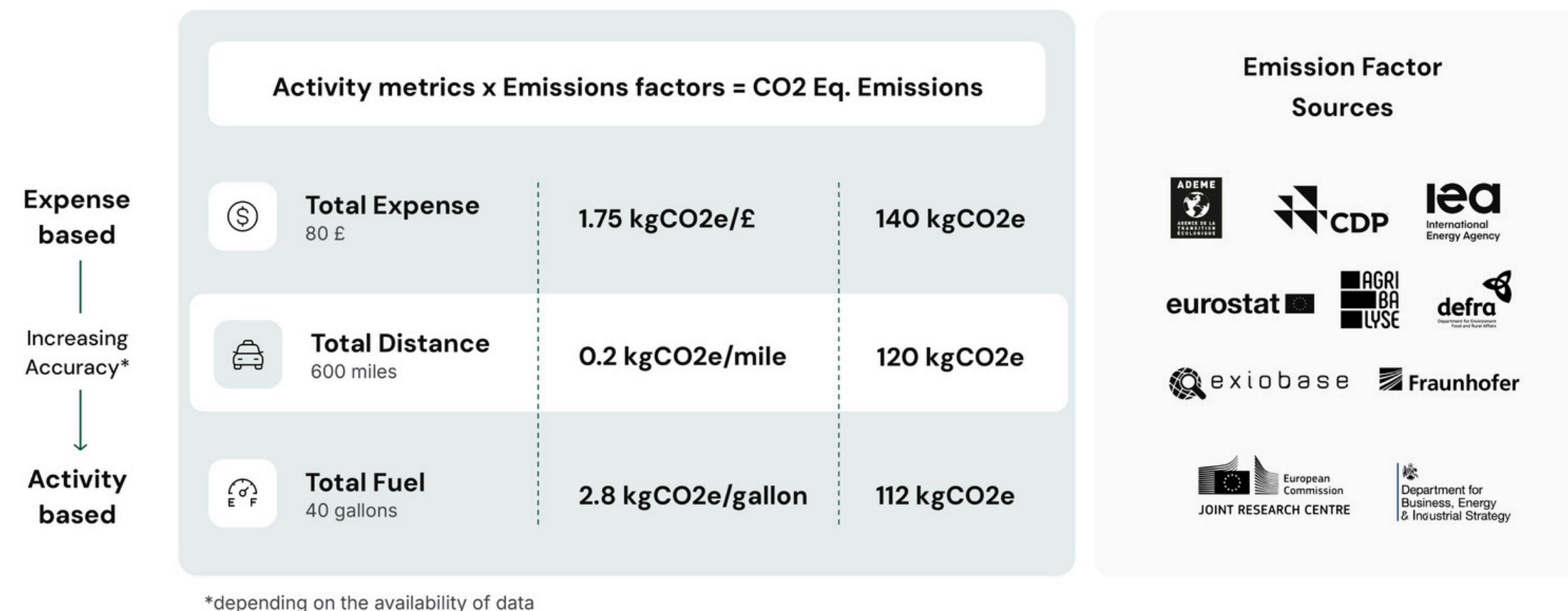




# Greenhouse Gas (GHG) Emissions Reporting

## How are Emissions calculated

As this is our first disclosure, the figures presented should not be considered final. In particular, some Scope 3 categories have been calculated using a spend-based approach, which can lead to overestimation of emissions. We are improving the quality of our data by integrating primary data, engaging with our suppliers and implementing more accurate, activity-based calculation models.



Methodological reference: ADEME note on the use of accounting data for the GHG Accounting



# Greenhouse Gas (GHG) Emissions Reporting

## General Overview FY24

As with most companies, the majority of our emissions do not originate in our factories or offices, but rather in the supply chain. This starts with the procurement of raw materials or finished products and ends with the delivery of our products to customers.

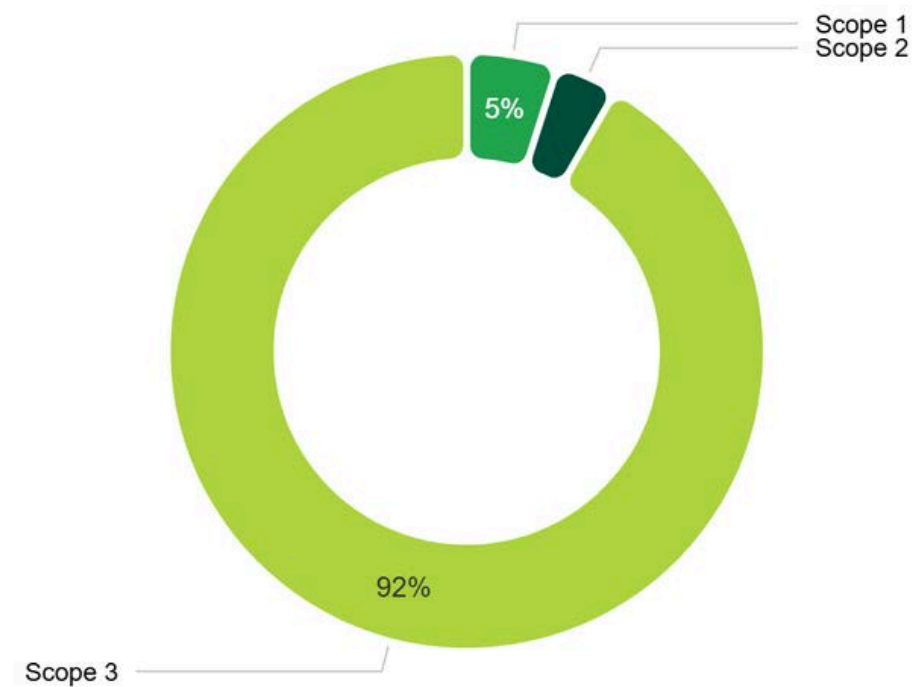
Emissions  
**133k**  
tCO2e

Emissions per employee  
**68.0**  
tCO2e/employee

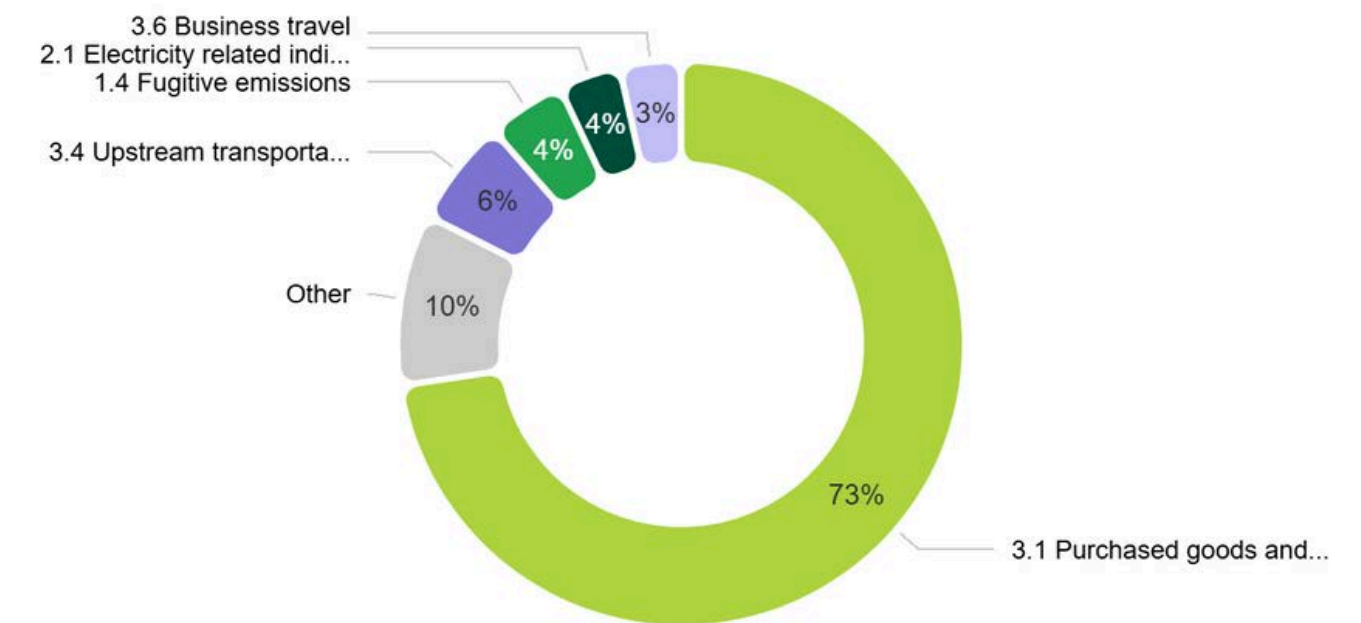
Emissions per revenue  
**276**  
tCO2e/revenue (M)

Share of activity-based  
**12%**  
of total emissions

*i* Emissions (tCO2e) by Scope ▾



*i* Emissions (tCO2e) by GHG Category ▾





# Greenhouse Gas (GHG) Emissions Reporting

## Scope 1 and 2 for FY24

We have access to 95% of activity data for Scope 1 and 2. This makes the calculation extremely accurate. For transport, which falls under Scope 1, we sometimes rely on spend data.

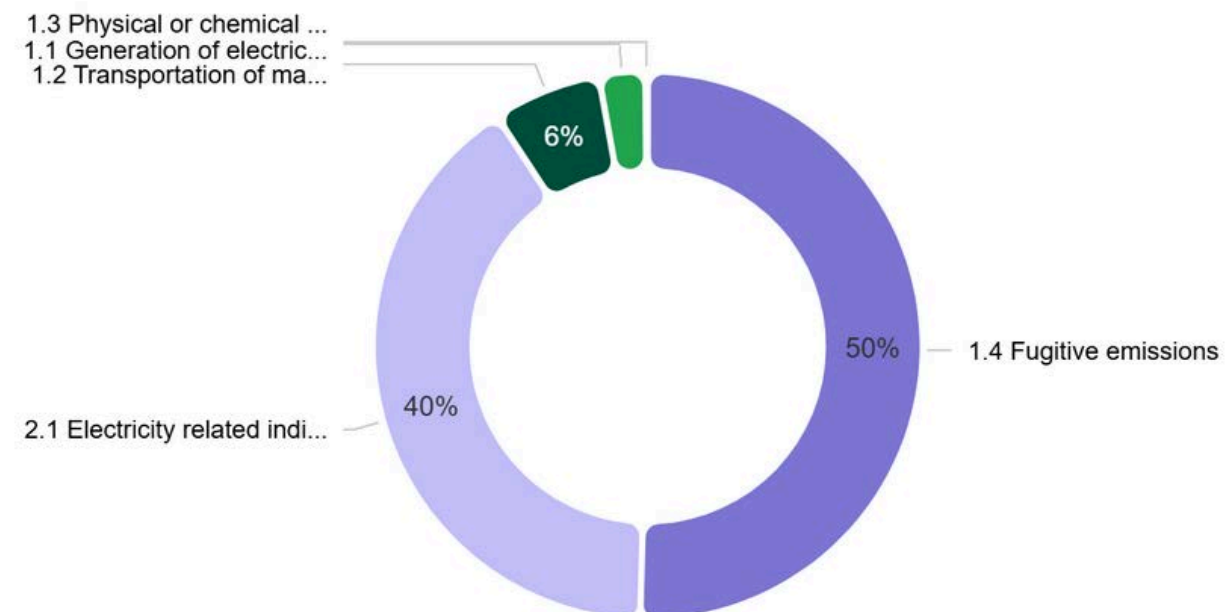
Emissions  
**11.0k**  
tCO<sub>2</sub>e

Emissions per employee  
**5.63**  
tCO<sub>2</sub>e/employee

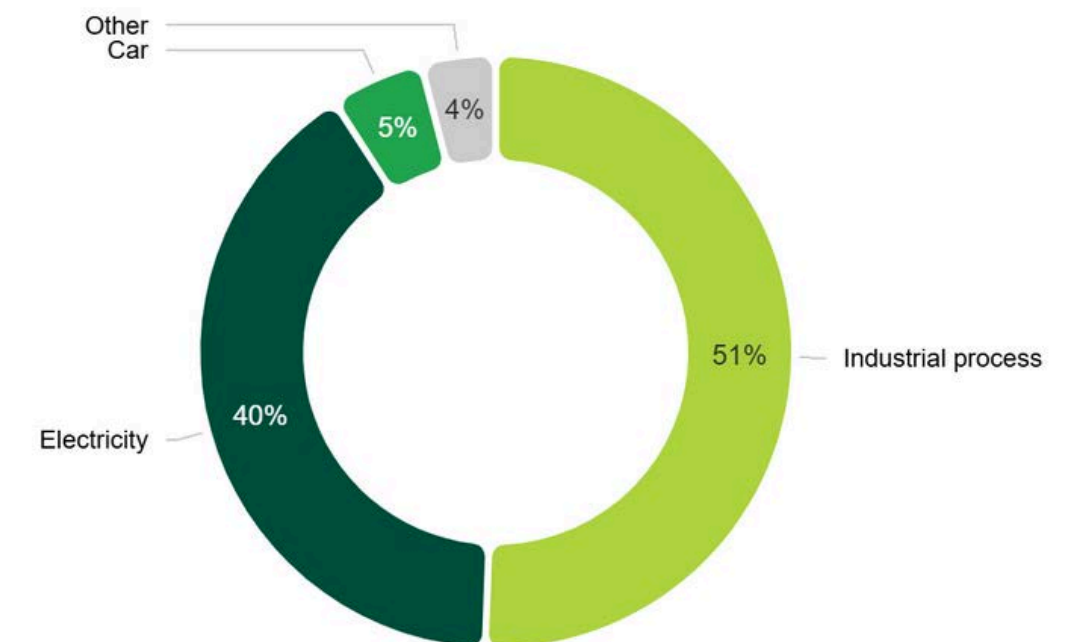
Emissions per revenue  
**22.8**  
tCO<sub>2</sub>e/revenue (M)

Share of activity-based  
**95%**  
of total emissions

i Emissions (tCO<sub>2</sub>e) by GHG Category ▾



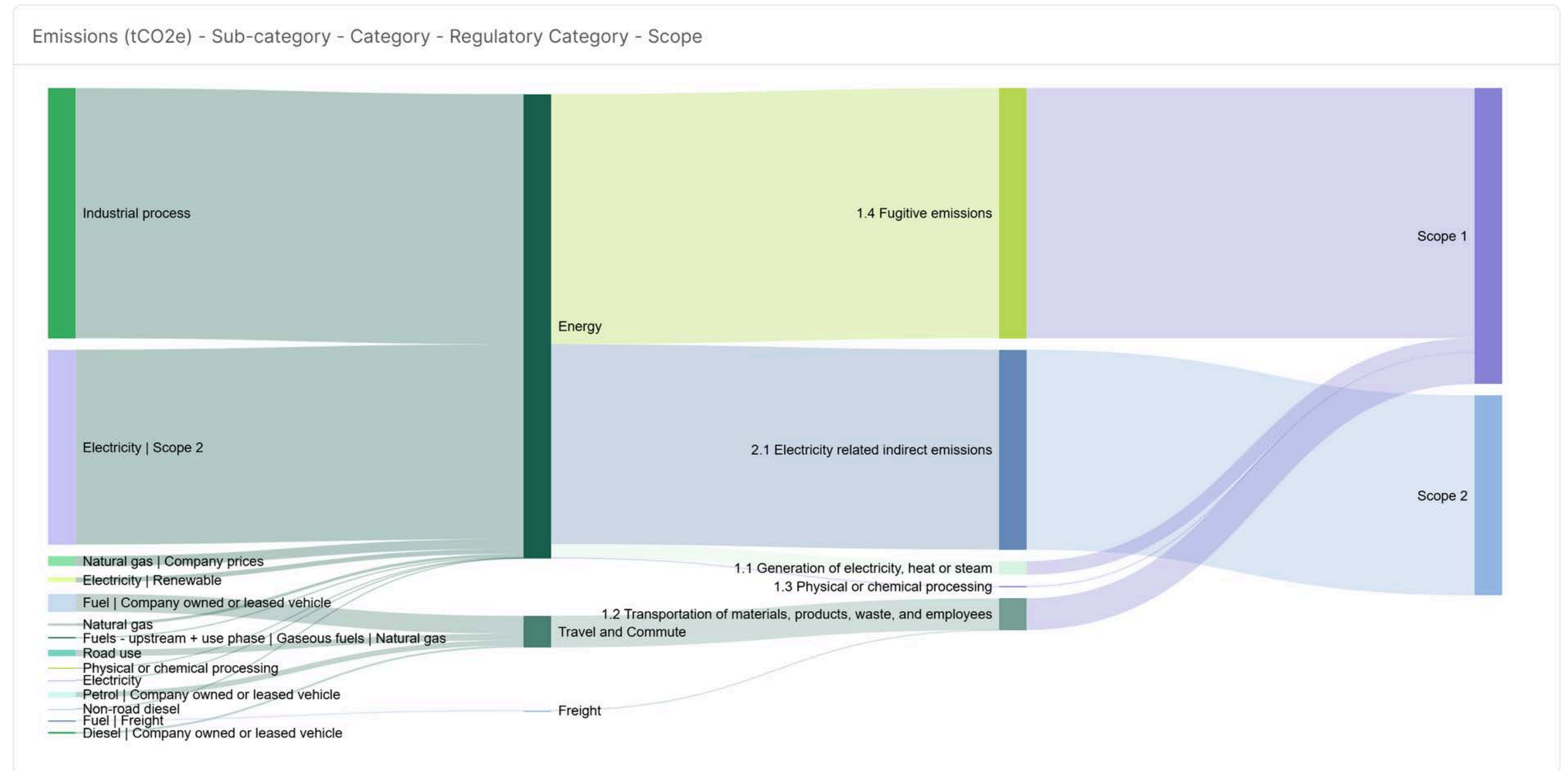
i Emissions (tCO<sub>2</sub>e) by Subcategory ▾





# Greenhouse Gas (GHG) Emissions Reporting

## Scope 1 and 2

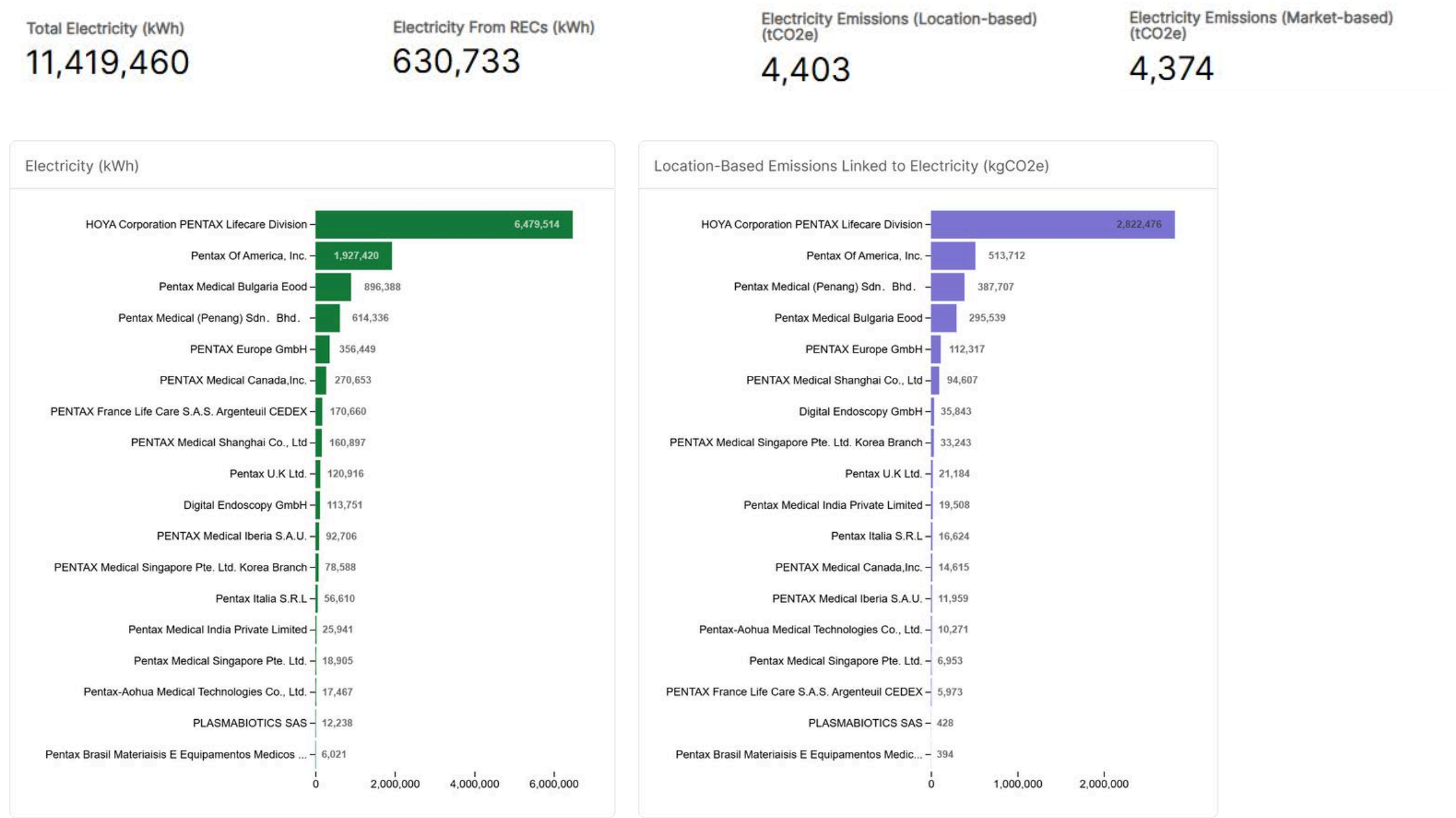




# Greenhouse Gas (GHG) Emissions Reporting



## Electricity FY24

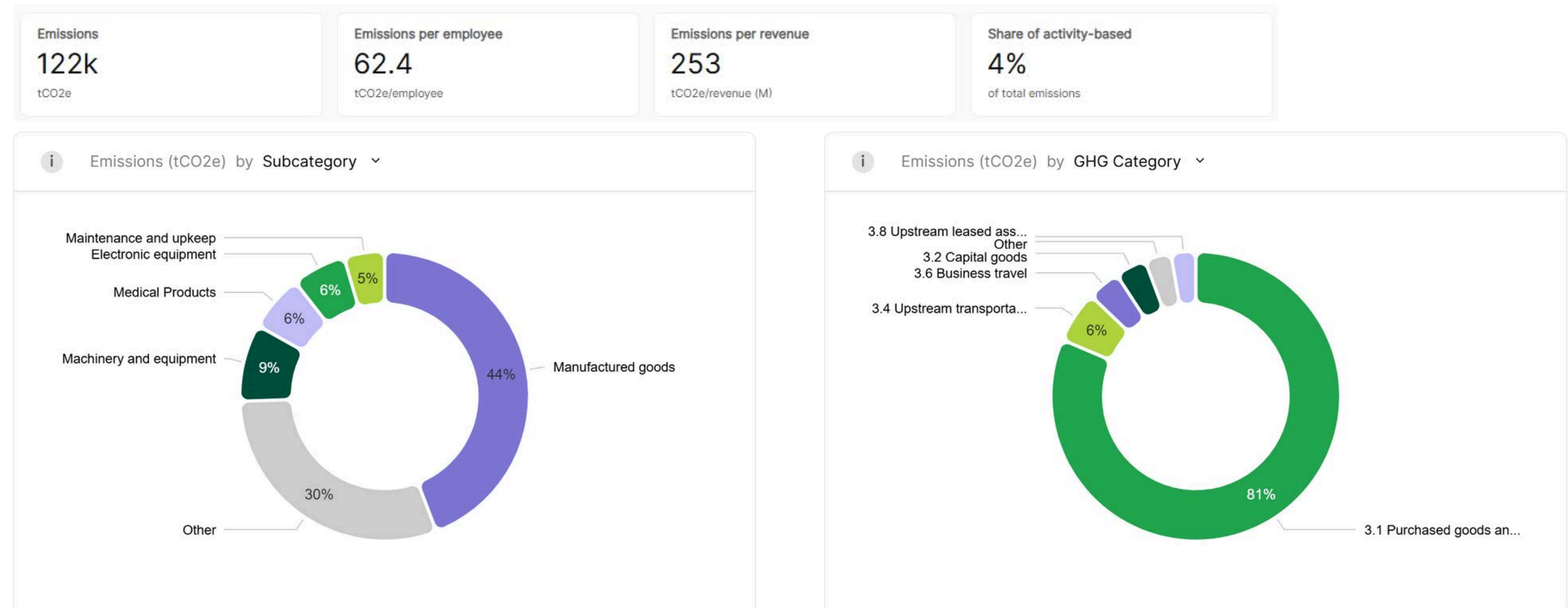




# Greenhouse Gas (GHG) Emissions Reporting

## Scope 3

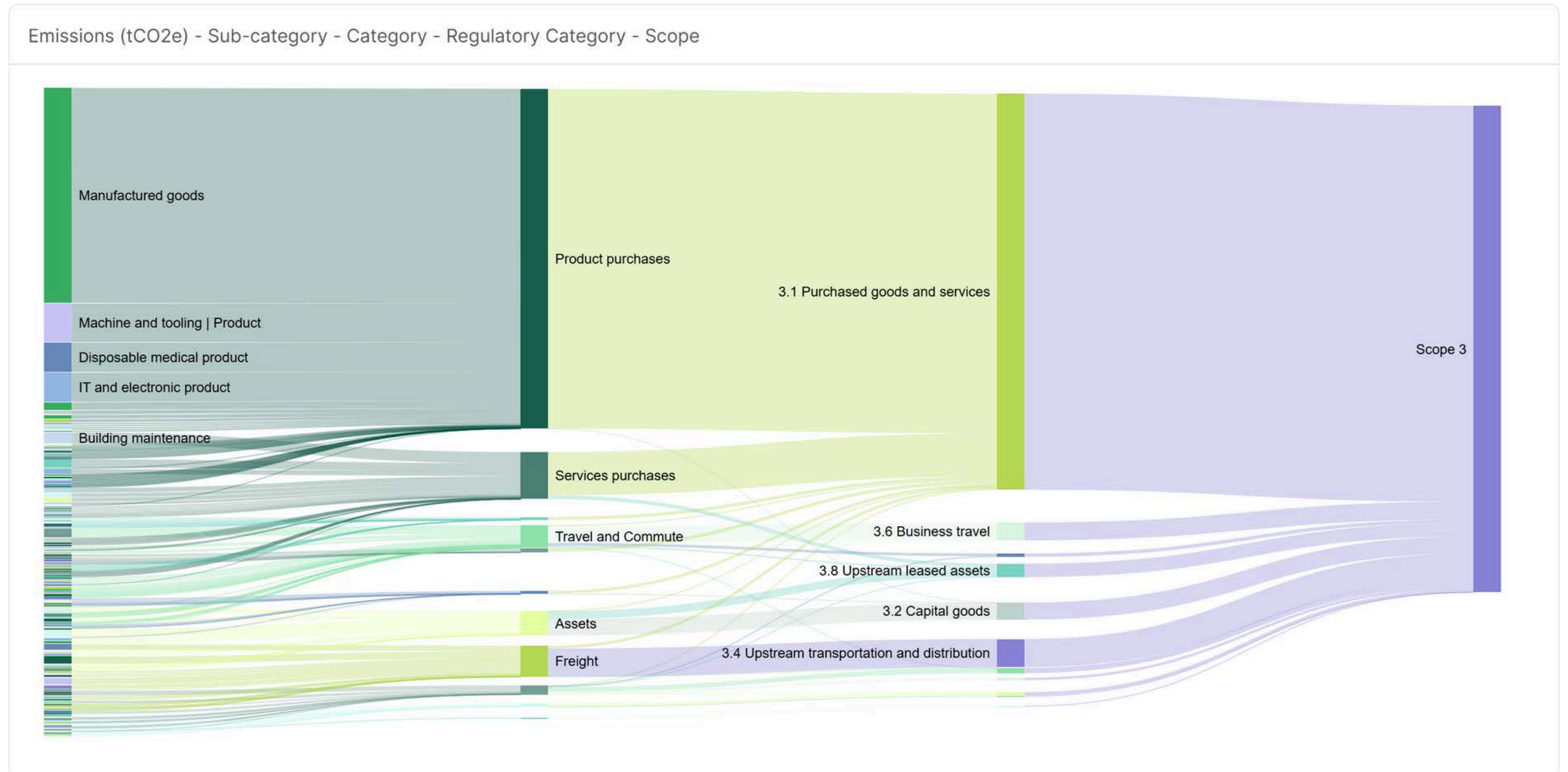
Like our customers, we are only at the beginning of collecting Scope 3 data. Using spend data, we can determine the categories and make a rough estimate. The majority of emissions are generated by the purchase of raw materials or finished products that we process or pass on to our customers.





# Greenhouse Gas (GHG) Emissions Reporting

## Scope 3





# Fiscal Year 2024



Disclaimer: The data presented in this table reflects the current status as of September 25 for fiscal year FY24. It is based in part on spend data and is therefore preliminary. Final data will be published in our Global Carbon Reduction Plan at the end of December 2025 and validated by our external partner, Greenly.

Scope	Category	Description	CO <sub>2</sub> e (tCO <sub>2</sub> e)	CO <sub>2</sub> (tCO <sub>2</sub> e)	CH <sub>4</sub> f (tCO <sub>2</sub> e)	CH <sub>4</sub> b (tCO <sub>2</sub> e)	N <sub>2</sub> O (tCO <sub>2</sub> e)	F-Gas (HFCs, CFCs, SF6, NF3)	CO <sub>2</sub> (tCO <sub>2</sub> )	CH <sub>4</sub> f (tCH <sub>4</sub> f)	CH <sub>4</sub> b (tCH <sub>4</sub> b)	N <sub>2</sub> O (tN <sub>2</sub> O)	CO <sub>2</sub> b (tCO <sub>2</sub> b)
1	1.1	Generation of electricity, heat or steam	30,056	20,579	2,562	733	6,182	0	20,579	86	27	23	0
1	1.2	Transportation of materials, products, waste, and employees	70,261	48,077	5,466	1,763	14,954	0	48,077	183	65	55	0
1	1.3	Physical or chemical processing	1,418	'-	'-	'-	'-	'-	'-	'-	'-	'-	'-
1	1.4	Fugitive emissions	555,266	'-	'-	'-	'-	'-	'-	'-	'-	'-	'-
2	2.1	Electricity related indirect emissions	443,916	376,712	23,902	22,039	21,262	0	376,712	802	816	78	0
2	2.2	Steam, heat and cooling related indirect emissions	0	0	0	0	0	0	0	0	0	0	0
3	3.1	Purchased goods and services	9,933,578	8,598,431	880,795	0	326,754	127,597	8,598,431	29,557	0	1,197	3
3	3.2	Capital goods	424,704	424,429	181	0	67	26	424,429	6	0	0	0
3	3.3	Fuel- and energy- related activities not included in Scope 1 or Scope 2	130,346	90,822	27,443	1,735	10,346	0	90,822	921	64	38	0
3	3.4	Upstream transportation and distribution	776,987	674,582	53,219	0	49,186	0	674,582	1,786	0	18	0
3	3.5	Waste generated in operations	77,874	56,949	6,019	0	14,906	0	56,949	202	0	55	15
3	3.6	Business travel	444,958	386,225	30,505	11	28,207	1	386,225	1,024	0	103	0
3	3.7	Employee commuting	87,037	71,951	6,139	583	753	834	71,951	206	22	28	0
3	3.8	Upstream leased assets	337,985	335,624	114	544	678	0	335,624	38	2	2	0
3	3.9	Downstream transportation and distribution	0	0	0	0	0	0	0	0	0	0	0
3	3.1	Processing of sold products	63,924	51,032	7,024	2,378	3,491	0	51,032	236	88	13	0
3	3.11	Use of sold products	0	0	0	0	0	0	0	0	0	0	0
3	3.12	End-of-life treatment of sold products	23	17	2	0	4	0	17	0	0	0	0
3	3.13	Downstream leased assets	0	0	0	0	0	0	0	0	0	0	0
3	3.14	Franchises	0	0	0	0	0	0	0	0	0	0	0
3	3.15	Investments	55	4	4	0	11	0	4	0	0	0	0

Environmental

Social

Governance



# Greenhouse Gas (GHG) Emissions Reporting

## Outcome and next steps

### Progress Made

- Initiated renewable electricity sourcing via RECs/EACs, improving the accuracy of emissions data
- Established a centralized global tracking system for energy and emissions

### Areas for Improvement

- Expand renewable electricity sourcing, prioritizing high-impact regions
- Upgrade energy efficiency at our most energy-intensive sites—ensuring maximum efficiency for every kilowatt consumed
- Standardize data collection and reporting across all global entities, and transition from spend-based to activity-based calculations in Scope 3 (value chain emissions)
- Deepen strategic supplier collaboration to address key Scope 3 drivers by requesting data for raw materials, product purchases, and freight

### Global Reduction Plan

We are only at the beginning of our sustainability journey. Our next milestone is the publication of our first Global Carbon Reduction Plan in December 2025. In this plan, we will not only provide improved data but also map our activities and set targets per category. The full report will be released on our external homepage. [Sustainability at PENTAX Medical: Environmental Responsibility](#).

In addition, since 2023, PENTAX Medical UK has maintained a local Carbon Reduction Plan compliant with the UK Procurement Policy Note (PPN) 06/21. The current version (2024) is publicly available [pentax-medical-uk-crp-2024.pdf](#)





# Integrating Sustainability Across the Entire Product Life Cycle

For us as a company, sustainability is only tangible and effective if it is not treated as a stand-alone project, but embedded into every single step of our work. That is why we decided to use a **simplified life cycle** of an endoscope to illustrate our measures.

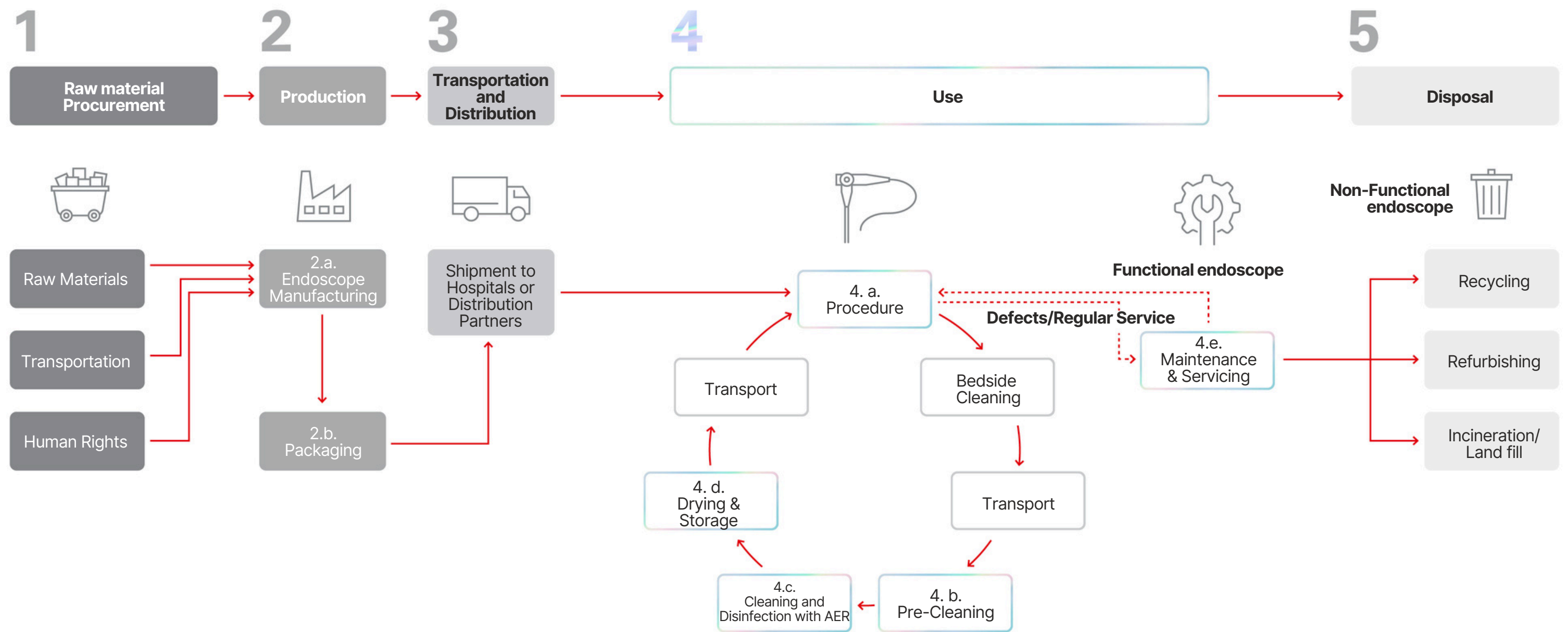
This approach serves two purposes: first, it enables us to **clearly assign measures** to the respective departments and transfer responsibility. Second, it **creates transparency** about which initiatives take effect at which stage of the product life cycle.

The same logic also applies to other medical devices beyond endoscopes – such as processors, reprocessing equipment, or complementary accessories. From the customer's perspective, all these products form a single system that is essential for clinical application. Therefore, they must also be considered together when it comes to sustainability.

Instead of focusing only on isolated product or material improvements, we take a step back to look at the **bigger picture** and consider how we can enhance sustainability across the entire system. This might mean rethinking the traditional life cycle of an endoscope – with the ambition to generate the greatest possible impact on sustainability.



# Simplified Representation of an Endoscope Life Cycle



Environmental

Social

Governance



# 1. Raw Material Procurement

The sustainability journey of every medical device begins with the procurement of raw materials. For us, this step goes far beyond sourcing steel, plastics, and other components – it also means taking **responsibility for the environmental and social impact of our supply chain**.

Medical devices must meet strict quality standards and regulatory approval criteria. As a result, replacing materials is a complex process that requires long-term planning. While sustainability will be easier to implement in future product generations, our **current focus** is on systematically understanding the impact of our materials. Starting in FY25, we will conduct **Life Cycle Assessments** that allow us to evaluate the sustainability and interchangeability of all materials, calculate their potential contribution to emission reduction, and determine whether a replacement is feasible – always with product quality and patient safety as the highest priority.

This distinction is particularly important when considering different product types. If a material change affects the durability of a reusable product that is designed for years of use, the sustainability impact must be assessed differently than for a single-use device, where material choices have a proportionally greater effect on the carbon footprint.

In addition, we also evaluate further aspects such as sourcing locally where possible, optimizing transport routes, and ensuring the respect of human rights across our supply base ([see Slide 101](#)). By integrating these considerations, raw material procurement becomes the foundation for both high-quality medical devices and a more sustainable product portfolio.





## 2a. Manufacturing



**The manufacturing stage is one of the most critical steps in reducing the environmental footprint of our products.** By continuously improving our processes and implementing internationally recognized standards, we aim to minimize the environmental impact of our production facilities without compromising product quality or patient safety.

Our factories in Japan are already certified according to **ISO 14001**, and we are expanding this certification to other sites in EMEA and globally in the coming years. This certification underlines our commitment to systematic environmental management and continuous improvement.

Energy efficiency and the use of renewable energy play a central role in this effort. Through our membership in the RE100 initiative, we are committed to achieving **60% renewable electricity by 2030** and **100% by 2040, with a dedicated reduction pathway already defined.**

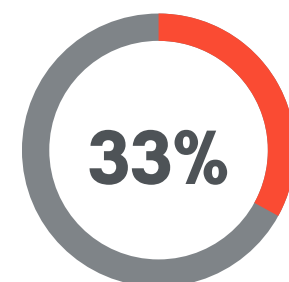
In addition, we are working to reduce production waste and to recycle materials wherever possible. Optimizing processes to minimize scrap and avoiding unnecessary single-use materials directly contribute to lowering our environmental footprint.

Manufacturing therefore represents more than just the creation of a medical device – it is a decisive step in ensuring that **sustainability and quality go hand in hand throughout the product life cycle.**



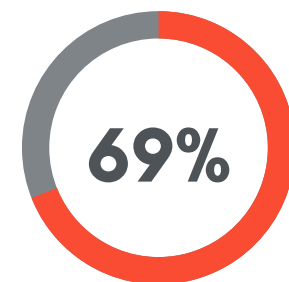
## 2b. Packaging

Since 2020, PENTAX Medical has made measurable progress in reducing the environmental footprint of its packaging and logistics operations. These achievements reflect our commitment to responsible consumption and production, in alignment with SDG 12.



### **Reduction in cardboard use**

*Achieved through packaging downsizing and design optimization*



### **Reduction in cushioning materials**

*Resulting from more compact packaging formats and material efficiency*

Significant cuts in plastic packaging, including replacing black plastic theft protection bags with transparent pallet wraps (projected to reduce 308 kg of plastic by March 2024), transitioning from polypropylene trays to recycled cardboard trays, and reducing the use of PE foam across logistics operations.

These initiatives not only reduce waste and emissions but also enhance supply chain efficiency and support hospitals in meeting their own sustainability goals.

At the same time, regulatory frameworks such as the EU Packaging and Packaging Waste Directive and similar national laws are setting ambitious requirements for packaging reduction and recyclability. Building on our achievements, we will launch a major project in FY25 to systematically classify and weigh all primary, secondary, and tertiary packaging. This initiative will allow us to identify further opportunities for optimization, implement additional improvement measures, and ensure compliance with evolving legislation.

By finding the right balance between safety and sustainability, PENTAX Medical demonstrates that packaging can be both protective and responsible – helping to transform endoscopy while shaping a healthier future for people and the planet.



# 3. Transport

Traditionally, transport in our industry has been primarily optimized for speed, cost, and reliability. Due to regional requirements and customer expectations, logistics have so far been managed largely independently by different countries and subsidiaries.

Starting in FY25, we will launch a global project to **consolidate transport information across all regions**. This harmonized approach will allow us to add sustainability as a central decision factor alongside the traditional criteria of cost and efficiency. Many logistics providers are currently improving their data quality on sustainability and sharing this information with their customers. This creates new opportunities to make fact-based decisions that balance environmental and economic considerations.

As part of our Life Cycle Assessments, we will evaluate in FY25 which measures are most effective in reducing **transport-related emissions up to the point of to customers**, based on a clear delivery cost-benefit analysis. Transport related to maintenance and repair is assessed separately in the service phase of the device life cycle (4e).

By integrating sustainability into transport decisions, we can achieve measurable reductions in emissions while maintaining the high level of reliability our customers depend on.





## 4. Use Phase



The use phase represents the most impactful stage in the life cycle of an endoscope. For comparability, we refer to published data where a lifespan of **six years and 1,280 applications** per reusable endoscope has been assumed. In the future, we will apply this figure as a **benchmark** for our own endoscopes. However, we know from experience that most endoscopes have a considerably **longer lifetime and are used more frequently**. The higher the number of applications and the lower the emissions per reprocessing cycle, the better the overall carbon footprint becomes. For this reason, we also plan to recalculate the product-specific Life Cycle Assessments (LCAs) based on the actual lifespan and usage patterns of our devices to provide even more accurate results.

Even though it may sound unusual for a medical device manufacturer: the longer an endoscope can be safely used, the more sustainable it becomes. Alongside factors such as energy consumption during clinical application, correct handling plays a decisive role in preventing damage and extending the device's lifespan.

*Pioche M, Pohl H, Cunha Neves JA Sustainability Committee of French Endoscopy society (SFED), et al Environmental impact of single-use versus reusable gastroscopes Gut 2024;73:1816-1822.*



# 4a. Procedure



Environmental

## Empowering Through Education: The Forward Academy

Recognizing that sustainability is a shared responsibility, PENTAX Medical launched the **Forward Academy**, a global education platform that trains the next generation of endoscopists. The academy offers:

- Hands-on training in sustainable reprocessing techniques
- Workshops on eco-conscious clinical practices
- Access to the latest innovations in endoscopy

This initiative aligns with **SDG 4 (Quality Education)**, ensuring that healthcare professionals are equipped with the knowledge and tools to deliver safe, sustainable care.

## Designing for Safety and Sustainability: Poka Yoke Principles

To ensure both safety and sustainability, PENTAX Medical has embedded **Poka Yoke** – a Japanese term for “**mistake-proofing**” – into its product development. This principle ensures that devices are designed to prevent user errors, especially during critical processes like endoscope reprocessing. By minimizing the risk of contamination and misuse, **Poka Yoke enhances both patient safety and operational efficiency, while supporting sustainable practices.**



Social

Governance

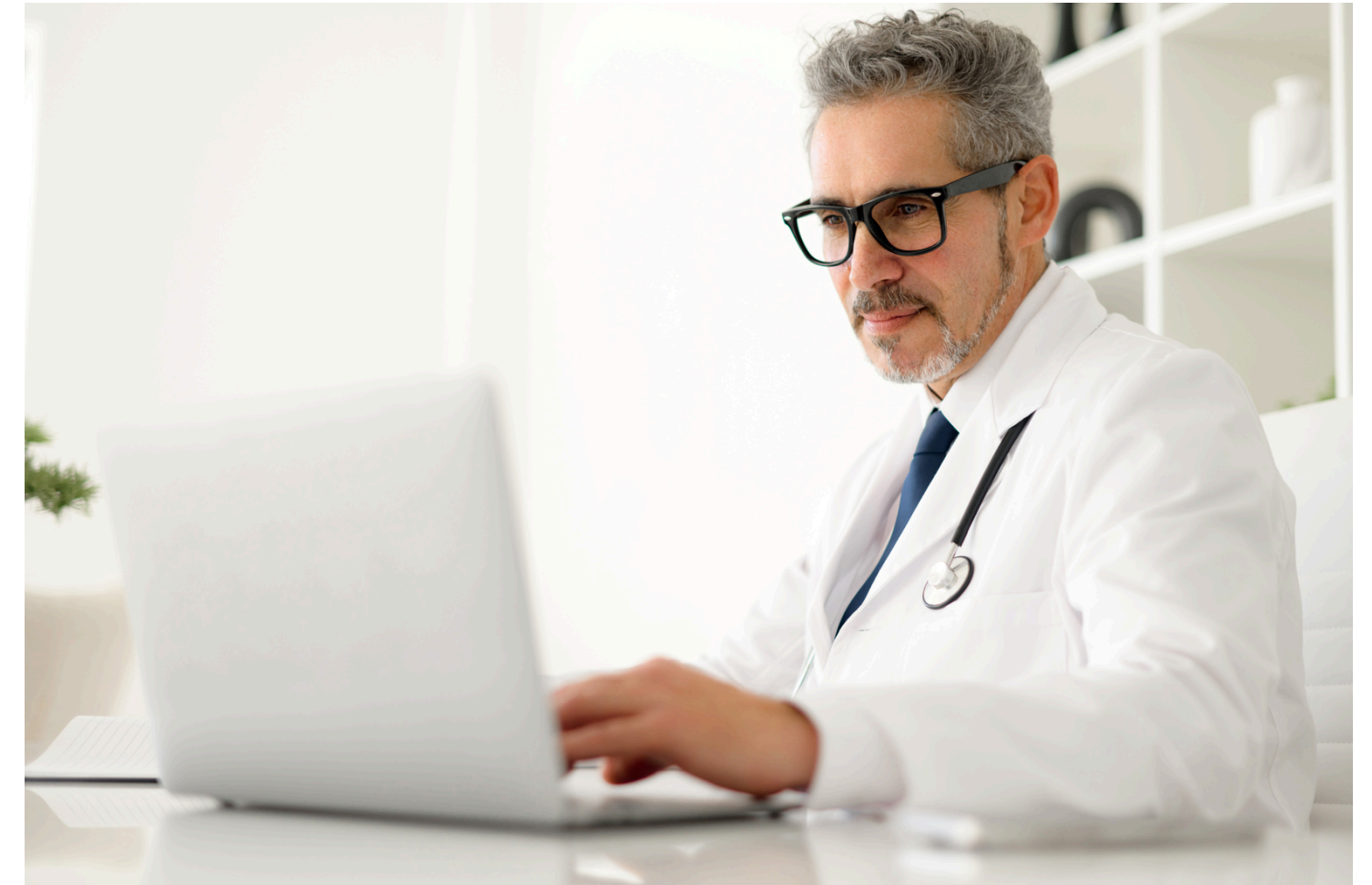


# 4a. Procedure



## Reprocessing Over Disposables

While single-use components remain necessary in high-risk settings such as ICUs, PENTAX Medical is actively investing in **new, resilient materials that can withstand multiple reprocessing cycles**. This innovation helps reduce reliance on disposables, which are a significant contributor to medical waste.



## Digital Documentation

Where legally permitted, we are transitioning to electronic **Instructions for Use (eIFUs)**. This reduces paper consumption and packaging waste, while maintaining compliance and accessibility for healthcare professionals worldwide.



## 4b. Pre-Cleaning

### Pre-Cleaning – AquaTYPHOON

The reprocessing of endoscopes is one of the most resource- and emission-intensive stages in the entire life cycle. Multiple studies highlight that the repeated use of water, detergents, chemicals, and single-use accessories makes reprocessing a major driver of the overall environmental footprint of flexible endoscopy

Each pre-cleaning cycle consumes large volumes of water and chemicals, as well as single-use plastics such as brushes, caps, and packaging.

To address this challenge, PENTAX Medical developed **AquaTYPHOON**, an innovative air/water-based pre-cleaning system that replaces the use of brushes and detergents with a **standardized, automated process**. By eliminating detergents and single-use cleaning tools, AquaTYPHOON significantly reduces the environmental footprint of reprocessing while enhancing patient safety and staff efficiency.



#### Sources

- Maida M, Vitello A, Shahini E, Vassallo R, Sinagra E, Pallio S, Melita G, Ramai D, Spadaccini M, Hassan C, Facciorusso A. Green endoscopy, one step toward a sustainable future: Literature review. *Endosc Int Open*. 2024 Aug 23;12(8):E968-E980. doi: 10.1055/a-2303-8621. Erratum in: *Endosc Int Open*. 2024 Sep 13;12(8):C7. doi: 10.1055/a-2414-3571. Erratum in: *Endosc Int Open*. 2025 Jul 14;12(8):C5. doi: 10.1055/a-2649-7488. PMID: 39184060; PMCID: PMC11343619.
- Crisciotti C, Fugazza A, Menini M, et al Endoscope reprocessing—resource consumption and emissions. *Gut* Published Online First: 26 February 2025. doi: 10.1136/gutjnl-2024-334457



# Contribution to Sustainability Caring for Environment

PENTAX Medical aims to support the UN Sustainability Development Goals:



The patented process uses water and air only, which **eliminates the need for chemical detergents** as well as **single-use brushes, syringes and other waste**.

  
**>99%**  
waste reduction<sup>1</sup>



**AquaTYPHOON reduces water consumption** compared to standard manual pre-cleaning procedures.

  
**70-89%**  
less water consumption<sup>2</sup>



For 5000 procedures per year

1. Evaluated in internal tests against standard manual pre-cleaning procedures.

2. Calculated with 1 filter exchange annually with AquaTYPHOON (= 510 g waste) compared to more than 861 kg waste (single-use syringes, brushes, etc.) in standard manual pre-cleaning.



# AquaTYPHOON Study in France

- Carried-out at Beaujon Hospital in Paris, France
- Compared AquaTYPHOON to manual cleaning in terms of ergonomics, efficiency, sustainability and costs
- Presented at JFHOD 2025 (poster) and ESGE Days 2025 (oral presentation)

## Outcomes

- **Ergonomics:** AquaTYPHOON **reduces arduousness** of the cleaning step and **reduces the risk of human errors**
- **Efficacy/Safety:** No protein residual detected both after AquaTYPHOON cleaning and AER (short cycle)
- **Efficiency:** AquaTYPHOON **cuts the cleaning** time by factor of 2

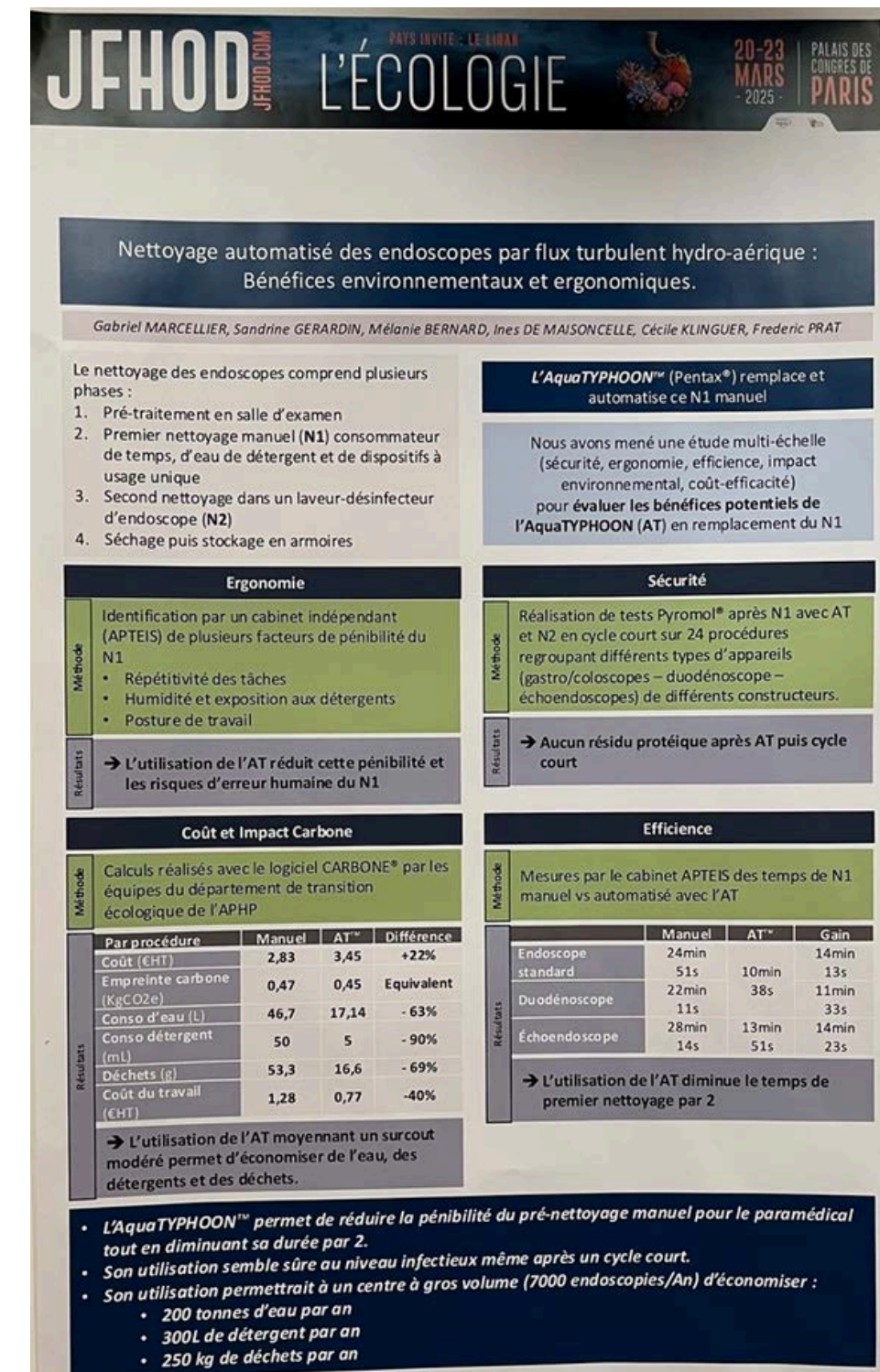
## Sustainability:

- Water consumption reduction by **-63%**
- Detergent consumption reduction by **-90%** (detergent and surface disinfectant)
- Waste generation reduction by **-69%** (brushes, syringes, PPE and wipes)
- Calculated carbon footprint (kg CO<sub>2</sub>): **equivalent**

## Costs:

- AquaTYPHOON reduces labor costs by **-40%**
- Calculated cost per treatment (taking into account labor costs): similar

**More studies in  
progress**





## 4b. Pre-Cleaning



AquaTYPHOON was designed from the outset as an open system, ensuring compatibility with endoscopes from all major brands, not only PENTAX Medical. This reflects our philosophy that sustainability should not stop at competitive boundaries: the greatest environmental benefit is achieved when as many hospitals and healthcare professionals as possible adopt more sustainable practices. We are proud that AquaTYPHOON can lower the footprint of reprocessing across the entire market – not only for our own devices.

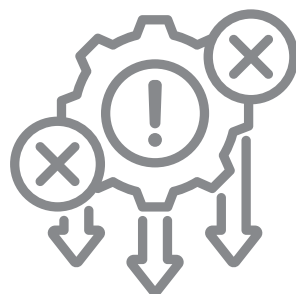
### **Life Cycle Assessments**

As part of our broader LCA activities, **AquaTYPHOON will be fully integrated into our assessments.** This will provide us with a precise footprint for the product itself, while also allowing us to quantify how the footprint of an endoscope changes when traditional pre-cleaning is replaced by AquaTYPHOON. By generating transparent, data-driven comparisons, we will be able to demonstrate the tangible sustainability improvements that AquaTYPHOON enables.



## 4b. Pre-Cleaning

## Environmental



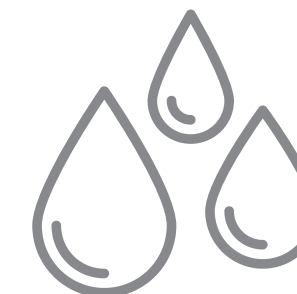
### System-Level Impact

By standardizing the pre-cleaning process, **AquaTYPHOON reduces the variability and risk of human error that can occur with manual brushing.** This not only improves safety but also prevents avoidable reprocessing failures that would otherwise require repeated cleaning cycles - saving time, resources, and emissions. Importantly, these data also help to counter one of the frequent arguments against reusable endoscopes - that high water consumption makes them less sustainable. **AquaTYPHOON shows that innovation in reprocessing can significantly lower this impact,** reinforcing the case for reusables as a sustainable solution.



### Barriers and Future Work

Despite these proven benefits, adoption is challenged by the fact that current reprocessing guidelines and approvals are often written around traditional manual cleaning methods. PENTAX Medical continues to work with regulators, scientific societies, and healthcare providers to **demonstrate the safety, efficacy, and sustainability of AquaTYPHOON.** The publication of **peer-reviewed studies** (e.g., Endoscopy International Open, 2025) and independent validations are important steps in this journey, but further updates to guidelines will be required before widespread adoption can be achieved.



### Clean

At PENTAX Medical, we believe that the environmental and clinical benefits of AquaTYPHOON make it one of the most impactful innovations in sustainable endoscopy. It represents not only a technological advance but also a cultural shift: **moving away from chemical- and plastic-intensive cleaning** toward a standardized, water-based, and environmentally conscious approach.

## Social

## Governance

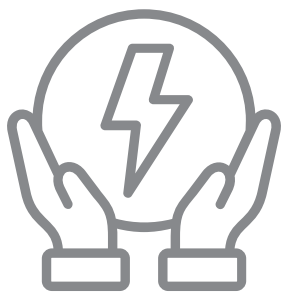


# 4c. Cleaning & Disinfection



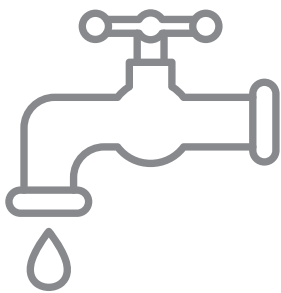
Cleaning and disinfecting endoscopes is a highly resource-intensive step. Washer-disinfectors consume significant amounts of water, energy, and process chemicals. At the same time, this stage is essential for ensuring patient safety and compliance with international standards such as **ISO 15883**.

From a sustainability perspective, the key factors are:



**Energy Consumption**

Optimized temperature settings, shorter cycle times, and efficient system design reduce electricity demand



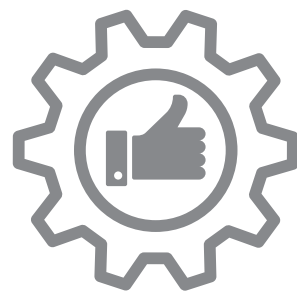
**Water Consumption**

Closed-loop systems, optimized rinsing processes, and avoiding unnecessary repeat cycles minimize usage



**Chemicals**

Selecting effective but environmentally friendly detergents and disinfectants lowers the ecological footprint



**Process Reliability**

Automation and standardization prevent errors, avoiding the need for repeated cleaning cycles that would increase resource use

As part of our **Life Cycle Assessments**, we will collect detailed data directly from washer-disinfector manufacturers to quantify emissions and resource consumption. This will allow us to identify best practices and ensure that future technologies support both patient safety and sustainability.



## 4d. Drying & Storage

After cleaning and disinfection, the **drying and storage phase is critical** to ensure that endoscopes remain safe for clinical use. Inadequate or delayed drying can create residual moisture inside the channels, increasing the risk of microbial growth, biofilm formation, contamination, and shortened product lifespan. Traditionally, drying has been a time- and energy-intensive process, often taking several hours and requiring complex infrastructure.

### PlasmaTYPHOON™+ – Innovation in Drying and Storage

With PlasmaTYPHOON™+, PENTAX Medical has introduced a technology that enables fast, standardized, and reliable drying of flexible endoscopes. Independent studies have demonstrated that **PlasmaTYPHOON™+ achieves complete drying within minutes and ensures safe storage conditions for extended periods.**



#### Speed & Efficiency

Drying in minutes instead of hours reduces turnaround time, enabling hospitals to work more efficiently with fewer endoscopes in circulation.



#### Safety

By reliably eliminating residual moisture, the system significantly lowers the risk of contamination and infection.



#### Sustainability

Faster drying processes reduce energy and medical air consumption compared to traditional drying cabinets.





## 4d. Drying & Storage

### Single-Use Storage Bags with the lowest possible environmental impact

To complement **PlasmaTYPHOON™+**, we developed the **PlasmaBAG ECO single-use bags** for storage. Although these bags do introduce plastic material into the hospital setting, they are designed to minimize environmental impact where single-use storage is unavoidable. Key features are:

- They are made with **80 % recycled polyethylene** and carry the Blue Angel (Der Blaue Engel) eco-label ([plasmabiotics.com](https://plasmabiotics.com))
- The production of the bags is **carbon-neutral**, supported by a reforestation project ([plasmabiotics.com](https://plasmabiotics.com))
- The bags allow safe storage of completely dried endoscopes for **up to 31 days, maintaining the disinfected state** ([plasmabiotics.com](https://plasmabiotics.com))

By using these EcoBags, hospitals can ensure patient safety and device readiness while reducing the environmental footprint associated with prior storage/transport packaging materials. Our goal is not zero plastic (which is currently not feasible for single-use sterile storage), but to make the best possible choice where it's needed.



To ensure patient safety, the production of medical products is regulated by stringent quality assurance processes and safety regulations. Carbon emissions can therefore not always be completely avoided. To compensate for this, we seek ways to neutralize our carbon emissions. We are happy to support natureOffice projects to compensate for the carbon emissions in the production of our Plasmabag ECO.

Until 2023, Plasmabiotics supported a reforestation project in Togo [natureOffice | Climate protection projects in Africa: Project Togo |...](#)

In 2024, Plasmabiotics supported the Bujagali Hydropower Project in Jinja, Uganda. At the last calculation date (October 29, 2024), 114 tons of CO<sub>2</sub>e had been offset.

As a result, all PlasmaBAG ECOs are carbon neutral.



[natureOffice.com/DE-077-996065](https://natureOffice.com/DE-077-996065)



# 4d. Drying & Storage

## System-Level Impact

- Reduced energy and medical air consumption due to shorter drying cycles
- Lower plastic footprint through recyclable PlasmaBAG ECO
- Extended product lifespan thanks to optimal drying and storage conditions
- Improved hospital efficiency by reducing reprocessing bottlenecks

## Validation and Clinical Evidence

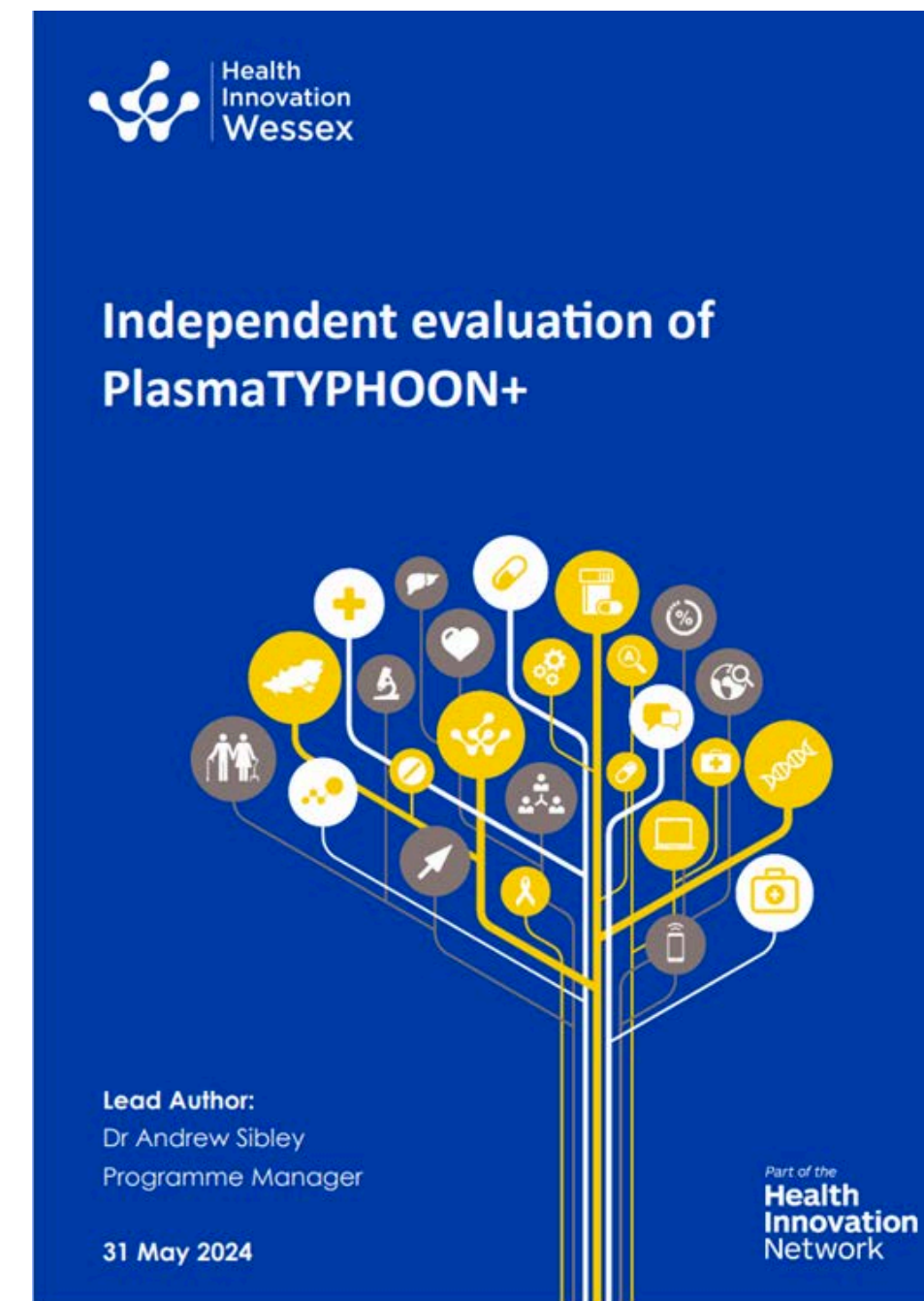
The independent **Wessex Study (Nov 2023 – May 2024)** evaluated PlasmaTYPHOON™+ and EcoBags in clinical practice. Results demonstrated:

- **Superior infection prevention** compared to conventional drying and storage methods
- **Reduced reprocessing times**, helping hospitals avoid workflow bottlenecks
- **Lower environmental impact**, with measurable reductions in energy use and plastic waste

These independent findings provide robust evidence that PlasmaTYPHOON™+ with EcoBags delivers both patient safety and sustainability benefits.

## Looking Ahead

As part of our Life Cycle Assessments, we will integrate drying and storage data to quantify the resource savings achieved with PlasmaTYPHOON™+ and EcoBags compared to conventional drying and storage methods. This will enable us to demonstrate transparently how innovation in this step contributes directly to emission reduction and more sustainable healthcare.



Full Wessex AHSN  
Evaluation Report



# 4e. Maintenance & Service

**Maintenance and servicing play a decisive role** in the overall sustainability of endoscopes, yet they are often excluded from traditional Life Cycle Assessments (LCAs). The reason is that repair frequency and scope depend on many different factors—such as user handling, clinical setting, and case mix - which makes standardized modeling complex.

Nevertheless, at PENTAX Medical we recognize that including **maintenance and repair is essential for a truly holistic LCA**. Over the coming years, we will expand our assessments to capture the environmental impact of repair processes. Relevant factors include:

- Transport routes for sending devices and components to service centers
- Use of spare parts, including the option for customers to accept reprocessed or reused components where clinically safe and desired
- Resource intensity of reprocessing after repair, similar to the use-phase reprocessing cycle

By integrating these data, we aim to make the environmental impact of servicing transparent and identify opportunities for improvement.

Our approach is closely aligned with one of our 12 Long-Term ESG Goals: “Enhance environmentally friendly repair processes”. This includes:

- Increasing the reuse and recycling rate of spare parts
- Reducing waste through more efficient repair methods
- Minimizing the use of chemicals in reprocessing
- Optimizing processes to extend the lifetime of each device

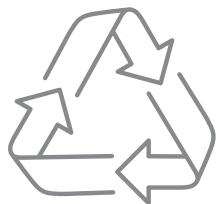
In this way, maintenance and servicing are not only a cost and safety factor but also a direct lever for sustainability. By extending product lifetime and making repair processes more resource-efficient, we can significantly reduce the overall footprint of endoscopy.



# 5. Disposal

At the end of their lifecycle, endoscopes and accessories must be safely disposed of to protect patients, healthcare workers, and the environment. Traditionally, disposal has been dominated by incineration and landfill, particularly for components contaminated through clinical use. While this ensures safety, it also creates significant emissions and waste.

From a sustainability perspective, our focus is on reducing the share of incineration and landfill and increasing more resource-conscious alternatives



### Recycling

Whenever possible, materials such as metals and plastics are separated and recycled, reducing the need for virgin raw materials



### Refurbishment

Selected components can be reprocessed, tested, and reused to extend their lifespan and avoid waste



### Safe Disposal of Chemicals

Ensuring that detergents, disinfectants, and other reprocessing-related chemicals are handled in line with strict environmental standards

As part of our future Life Cycle Assessments, we will also **integrate disposal data** to provide a holistic view of the total footprint of our products. This will help us to identify which materials are most critical at end-of-life and to prioritize design improvements that enable easier recycling or refurbishment.

In line with the principles of the circular economy, our long-term ambition is to **reduce end-of-life waste** to a minimum by making endoscopes and related medical devices more recyclable, easier to refurbish, and safer to dispose of.



# Single-Use Bronchoscopes

In certain situations, single-use bronchoscopes are indispensable – for example, when there is a high risk of contamination, when immediate availability is required, or when reusable endoscopes are logistically or hygienically difficult to deploy. At PENTAX Medical, our focus in these cases is not primarily on reprocessing, but rather on **evaluating materials and design options** to minimize the environmental footprint.

## Recent studies underline this perspective:

- A review showed that reusable bronchoscopes emit fewer greenhouse gases than single-use devices when used for more than around 50 procedures per year, and become financially advantageous at higher case volumes ([PubMed](#)).
- Another publication found that, in some categories – such as PPE usage, cleaning, energy consumption – the environmental impact of reusable and single-use bronchoscopes can be closer than expected. The key factors are the utilization rate of reusable scopes, the efficiency of reprocessing, and the transport and disposal burden of single-use devices ([Archivos de Bronconeumología](#)).
- A French life-cycle study comparing bronchoscopes for intubation indicated that reusable devices generally perform better in most environmental categories (e.g. global warming potential, resource use), except in water consumption ([HealthcareLCA](#)).

## Our Approach at PENTAX Medical

We are exploring ways to make our single-use bronchoscopes **more resource-efficient** and to **evaluate potential recycling and packaging improvements**.

We continuously assess the trade-offs between benefits and drawbacks – including manufacturing, transport, and end-of-life impact. Importantly, single-use solutions are not a substitute for sustainability but a **targeted solution for specific clinical needs**. Our priority remains with reusable endoscopes wherever this is safe and feasible.

## Looking Ahead – FY25

In FY25, we will conduct a full **Life Cycle Assessment (LCA)** of our single-use bronchoscope. This will help us:

- Quantify material and production emissions,
- Assess usage and disposal across different scenarios (e.g. procedure volumes, transport, recycling options),
- Identify opportunities to further optimize design.

By doing so, we will ensure that our single-use solutions remain clinically valuable while also aligning with our broader sustainability ambitions.



# Life Cycle Assessment (LCA) of Our Devices

## Why we Calculate LCAs (For Us and For Customers)

Lifecycle assessments quantify the climate impact of a device **“from cradle to grave,”** turning sustainability from a principle into design and purchasing criteria. Internally, LCAs reveal hotspots (materials, reprocessing, logistics) and guide eco-design, supplier engagement, and investment. Externally, hospitals and health systems increasingly request product-level carbon footprints to support tenders, reporting, and clinical pathway choices. Providing **transparent, standard-aligned LCAs** is therefore part of our service to customers. We align our approach with established frameworks for product footprints.

*ISO 14067: Meaning, Standard and Requirements - Greenly*



## How We Do It - And Why It's Complex

A **robust LCA** integrates bill-of-materials data, manufacturing processes and yields, energy mixes by geography, packaging, transport routes, the use phase (including reprocessing for reusable devices), service/repair, and end-of-life. Not every datapoint is directly measurable in early cycles. Some inputs (e.g., detailed supplier processes or exact transport legs) must initially be estimated and then replaced with primary data as our data pipeline matures. We follow **ISO 14040/14044 for LCA, use ISO 14067 for product carbon footprints (CFP)**, and draw on the **GHG Protocol Product Standard** for method choices and disclosure.

*ISO 14044:2006 - Environmental management — Life cycle assessment — Requirements and guidelines*



# Life Cycle Assessment (LCA) of Our Devices

## A Word of Caution on Comparability

Numbers from **different companies should not be compared at face value** unless goal/scope, functional unit (e.g., “per procedure”), system boundaries (do they include service/repair, reprocessing, and end-of-life?), data quality, allocation rules, geography, and verification are aligned.

Otherwise, superficial “league tables” risk rewarding narrow boundaries rather than real improvement (e.g., omitting service/repair can shift results materially). **ISO 14067** explicitly sets conditions for product comparisons. Without conformance and critical review, comparisons are unreliable. We will therefore disclose assumptions clearly and prioritize completeness over optics.

*ISO 14067:2018*

## What We Include (Cradle-to-Grave Scope)

- **Raw material procurement:** base materials, components, suppliers, and scrap/yields
- **Production:** site-level processes, energy mixes, yields, and ancillary inputs
- **Transportation:** inbound components and outbound devices, typical routes and modes
- **Use phase:** procedure-level energy/water/chemicals; for reusables, full reprocessing cycles
- **Service & repair:** parts, logistics, test cycles, lifetime extension effects
- **End-of-life:** reuse/refurbishment, recycling, disposal pathways and locations



# Life Cycle Assessment (LCA) of Our Devices

## What the Literature Shows

### (Context for Endoscopy and Similar Devices)

Published LCAs and reviews generally find **higher carbon footprints for single-use endoscopes** than for reusable systems - when the reusable pathway uses efficient reprocessing - though magnitudes vary by setting and assumptions (reported ratios range from ~2.5× in gastroscopy to ≥20× in specific ERCP scenarios). At the same time, reprocessing resources (energy, water, chemicals) can dominate the use-phase of reusable devices, making efficiency improvements there highly consequential. These results reinforce **two priorities**: avoid simplistic “single-use vs. reusable” generalizations and focus on measurable improvements in the reprocessing step.

## Our Program and Scaling Plan

In FY25 we **launched product carbon footprints** for five used devices (ISO 14067-aligned), using this first wave to build methods, data structures, and supplier engagement. Until the end of FY25 we will **scale from 5 to 50 products**, expanding primary data collection, replacing estimates (e.g., transport routes) with measured data, and harmonizing assumptions (functional unit, lifetimes, reprocessing cycles). Results will inform **eco-design choices** (materials, packaging, repairability/lifetime), reprocessing efficiency measures, and customer-facing product footprint summaries. Where appropriate, we will align with **emerging endoscopy reporting guidance** to improve transparency and comparability of methods.

## What This Means for Customers

We recognize that clinicians and procurement teams need credible, device-level climate data. We are therefore (1) **calculating LCAs to recognized standards**, (2) **publishing clear method notes and assumptions**, and (3) **using findings to reduce impacts** - especially in reprocessing energy and water - while maintaining performance and patient safety. That way, customers get high-quality information for decision-making, and the underlying footprint keeps improving over time.

*Environmental impact of single-use and reusable flexible cystoscopes - Kemble - 2023 - BJU Internat...*



# Our Product Carbon Footprinting Initiative

These five products were selected for the Life Cycle Assessment project and are currently being calculated. The calculations are expected to be completed in Q3 of FY25 and will be presented in our Carbon Reduction Plan in December 2025.



**PENTAX Medical INSPIRA™  
Video Processor**



**Gastroscope HD+ (EG29-i20c)**



**Fiber ENT Endoscope (FNL-7RP3)**



**PlasmaTYPHOON+**



**AquaTYPHOON**



# Sustainability in the Hospital

## Balancing Care and Carbon

Hospitals are essential for protecting human health - yet paradoxically, the **healthcare sector itself is responsible for around 4–5% of global greenhouse gas emissions**. Within this, **medical devices account for an estimated 10–30% of the footprint**.

Endoscopy, as a vital clinical procedure, is particularly resource-intensive due to the complex reprocessing required after every use and the vast amount of single use accessories.



## Hospitals as Climate-Sensitive Environments

Hospitals operate continuously, consuming vast amounts of energy for heating, ventilation, lighting, and medical equipment. Structural upgrades, such as improved building insulation, heat pumps, or renewable energy systems, can yield substantial emission reductions – as seen in recent NHS projects. At the same time, **hospitals must also consider local pollution**: waste management, transportation of staff and patients, and disposable materials all affect both the environment and public health. In the U.S., for example, hospitals emit nearly twice as much carbon as their European counterparts, contributing significantly to localized pollution and related health impacts.



**LEARN MORE**

Health Care Without Harm,  
Lancet Planetary Health



# Sustainability in the Hospital



## A Critical Infrastructure

Healthcare systems are **critical infrastructure**. Treatments and operations cannot be postponed to save emissions. The challenge is therefore to ensure that procedures are delivered as **carbon-conscious as possible** without compromising patient safety. This means balancing immediate clinical needs with long-term environmental responsibility.

## A Growing Focus on Scope 3

More and more hospitals are now **measuring their carbon footprint**. The NHS has demonstrated that only about **26% of emissions** fall under Scope 1 and 2, while around **74%** are Scope 3 – stemming from purchased products and services. This highlights the importance of supplier collaboration. Hospitals increasingly expect data transparency and carbon reduction commitments from their suppliers. For suppliers, this is not only a responsibility but also an opportunity to demonstrate reliability and build long-term partnerships.



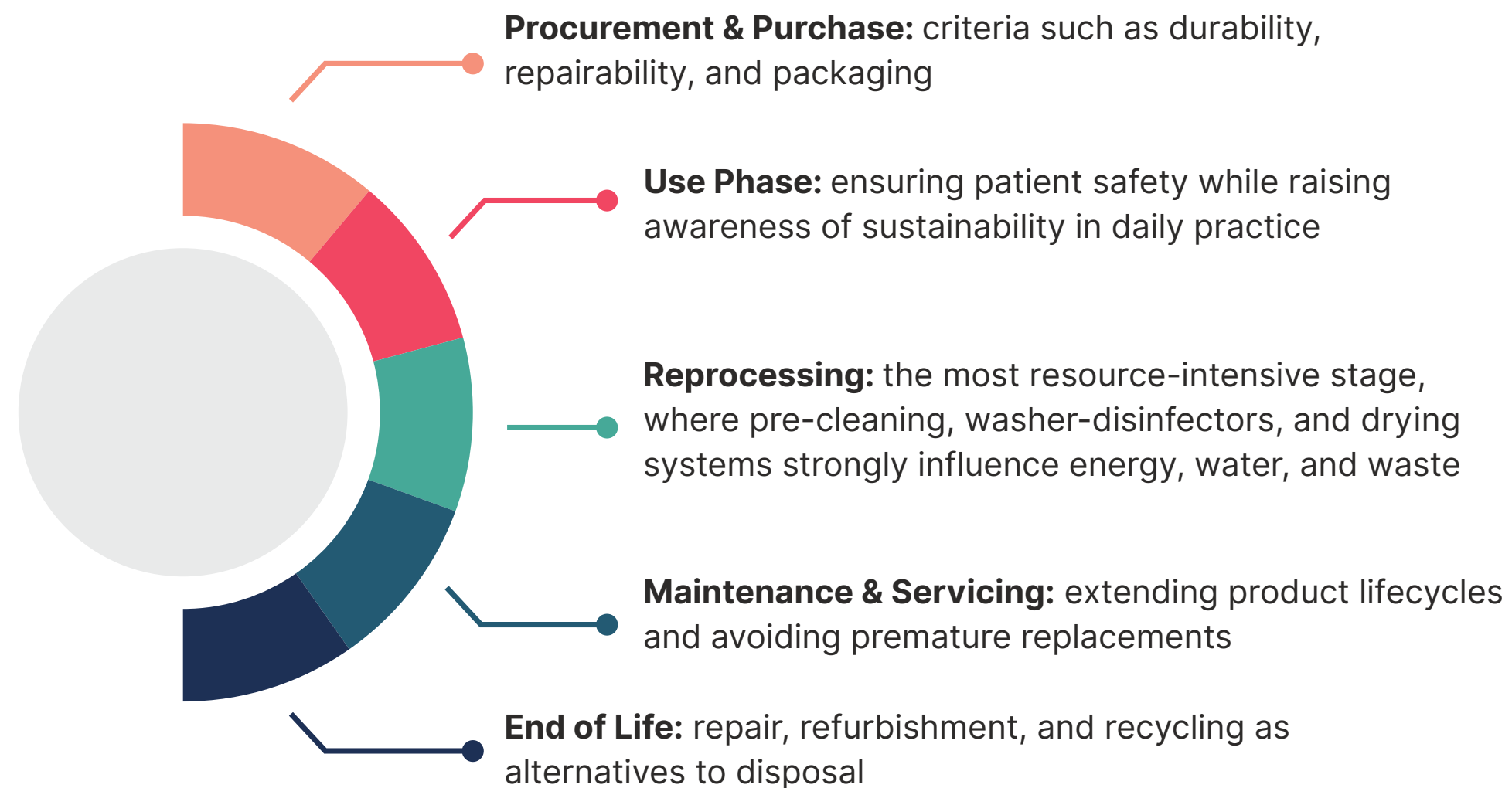
# Sustainability in the Hospital

## The Endoscope Lifecycle in the Hospital

Understanding the footprint of endoscopy requires looking at the entire lifecycle:



Finding the balance: the sustainability journey of PENTAX Medical



*By adopting this lifecycle perspective, hospitals can identify the stages with the highest environmental impact – and where targeted changes can deliver meaningful improvements.*



# How PENTAX Medical is Supporting Hospitals

Hospitals face unique challenges as they strive to deliver safe, high-quality care while also reducing their environmental impact. Addressing these challenges requires not only internal initiatives but also close collaboration with suppliers. At PENTAX Medical, we see our role as a partner: **listening to hospitals, understanding their priorities, and developing solutions together that support both patient safety and sustainability.**





# How PENTAX Medical is Supporting Hospitals



Hospitals face unique challenges as they strive to deliver safe, high-quality care while also reducing their environmental impact. Addressing these challenges requires not only internal initiatives but also close collaboration with suppliers. At PENTAX Medical, we see our role as a partner: **listening to hospitals, understanding their priorities, and developing solutions together that support both patient safety and sustainability.**

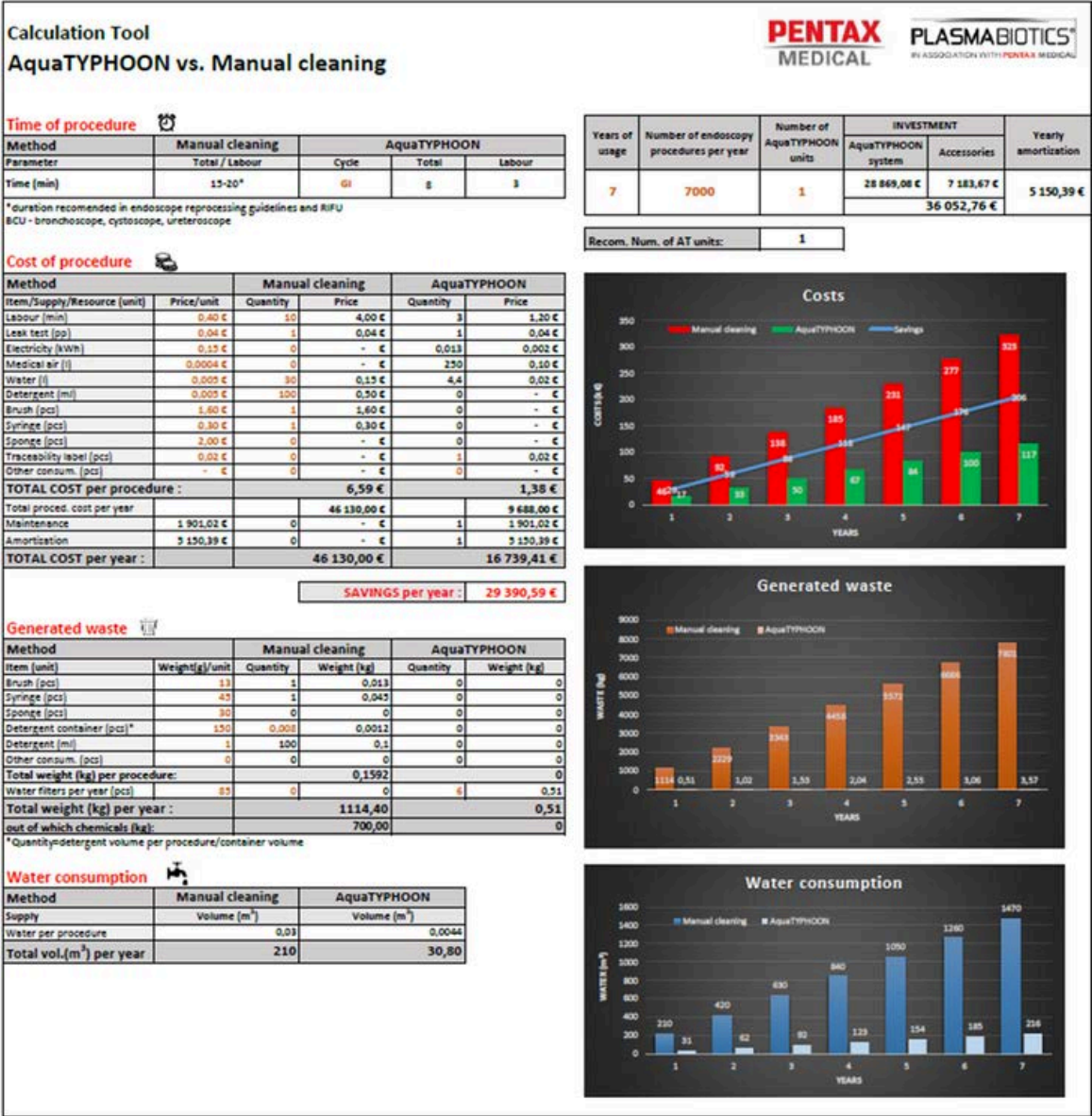
At PENTAX Medical, we believe that sustainability in healthcare can only be achieved in close partnership with hospitals. Our role is to listen, understand what matters most to clinical teams, and work together on solutions that combine patient safety with measurable environmental benefits. Along the lifecycle of an endoscope, we are gradually embedding this mindset into our products, services, and collaborations.

## Procurement and Environmental Value

Hospitals are increasingly including sustainability criteria in their purchasing decisions. To support this, we provide transparent tools that show the environmental and economic benefits of our solutions. With our AquaTYPHOON Calculator, hospitals can compare manual pre-cleaning with automated cleaning in terms of:

- Waste reduction (e.g. fewer consumables, lower chemical usage)
- Water savings
- Lower overall costs per procedure
- Time efficiency for clinical staff

This combination of ecological and economic advantages demonstrates that sustainability in hospitals does not need to be an additional burden. Instead, it represents an opportunity to reduce environmental impact while simultaneously improving efficiency and cost-effectiveness.





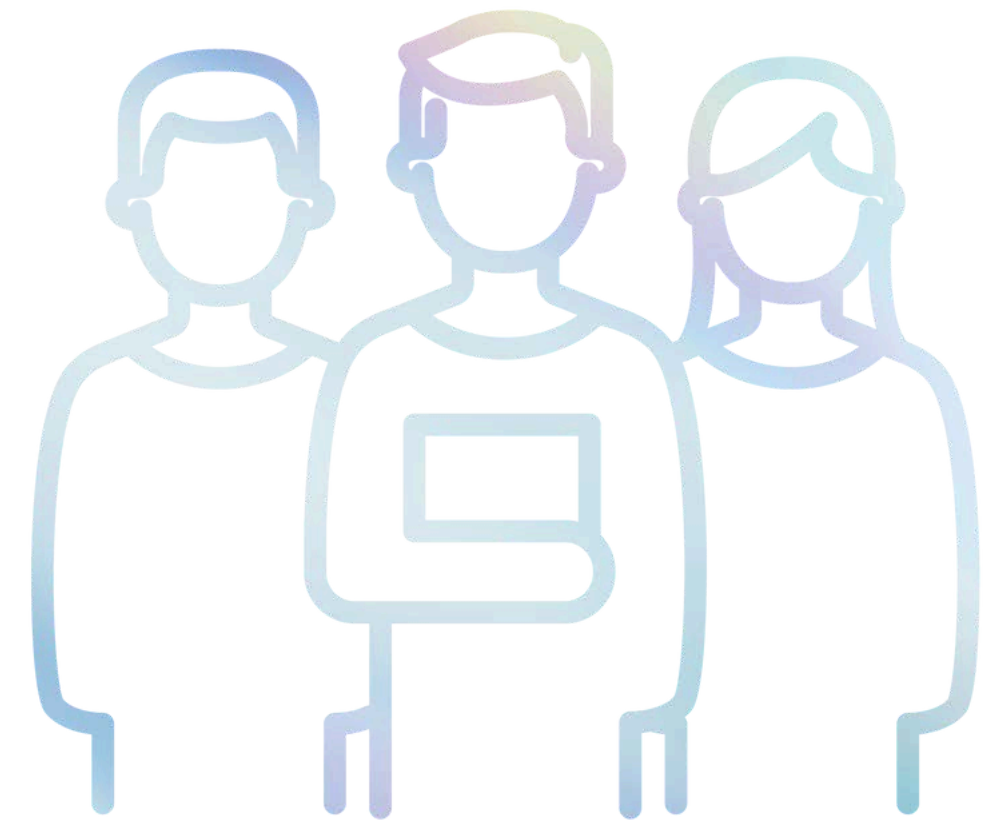
# How PENTAX Medical is Supporting Hospitals



## Use and Training

During clinical use, **safety remains the priority**. At the same time, we see the importance of empowering healthcare professionals to integrate sustainability into everyday practice. Through the **PENTAX Medical Forward Academy** and the **PENTAX Medical University**, we share knowledge and learn from hospitals about which sustainability aspects are most relevant to their workflows. In addition, we foster dialogue with international experts – for instance through our **expert podcast series** - to ensure our ESG efforts remain clinically grounded.

[» LEARN MORE](#) Expert Blog Series





# How PENTAX Medical is Supporting Hospitals



## Reprocessing Innovation

Reprocessing is often the most resource-intensive stage in the endoscope lifecycle. Here, we work with hospitals to find alternatives that reduce waste, energy, and water consumption.

The **AquaTYPHOON™** provides an automated alternative to manual pre-cleaning, helping to reduce single-use waste. For cleaning and disinfection, we collaborate with Wassenburg to provide washer-disinfectors that optimize chemical and water usage.

With the **PlasmaTYPHOON™+** system, we support hospitals in shortening drying times, lowering resource needs while maintaining hygienic safety.

A practical example of this approach is the **Green Endoscopy Unit** developed with the NHS in the UK. As the world's first carbon-negative endoscopy facility, it demonstrates how targeted innovations can drastically reduce water, energy, and chemical use while maintaining the highest standards of patient care.



# How PENTAX Medical is Supporting Hospitals

## Maintenance and End of Life

Extending the lifecycle of equipment is another important lever for sustainability. With our global service and maintenance programs, we aim to help hospitals reduce premature replacements and keep devices in optimal condition. At the same time, we are expanding repair and refurbishment services and exploring recycling opportunities to recover valuable materials at the end of life.

Where legally permitted, we also support hospitals in the transition to electronic **Instructions for Use (eIFUs)**, which reduce paper consumption and simplify access to documentation.





# UK Lighthouse Project – The Green Endoscopy Unit

In 2022, PENTAX Medical, together with our partner Actiform, launched a pilot Green Endoscopy Unit in Aberdeen. This first-of-its-kind facility served as proof of concept that endoscopy can be delivered in a way that balances patient care with environmental responsibility. Building on these learnings, FY24 saw development - in collaboration with the NHS - of a new, more advanced version.

This effort culminated in May 2025 at the BSG Live'25 conference in Glasgow, where we unveiled a Green Endoscopy Unit characterized by clinical excellence and measurable sustainability gains. The modular design integrates a 28 kWp solar array, advanced ventilation, and smart building management, achieving an EPC A+ (-3) energy rating — indicators of strong environmental performance. Scalable and connectable to existing hospital infrastructure, the unit is designed for broader adoption across the UK and beyond.

A centerpiece of the design is the holistic consideration of the full endoscopy pathway – from diagnostics to reprocessing. Innovative technologies such as AquaTYPHOON™ and PlasmaTYPHOON™+ reduce water and chemical consumption, single-use plastics are minimized, and workflow efficiencies are leveraged.





# UK Lighthouse Project – The Green Endoscopy Unit

## Environmental

An additional clinical pathway we emphasize is upper GI diagnostics using the transnasal approach (transnasal Endoscopy, TNE). This method is especially sustainable because:

- Patients do not require systematic sedation or anesthetic agents, reducing use of pharmaceuticals, related consumables, and energy/resources associated with recovery beds.
- They can remain seated, avoid changing into gowns, and skip needing recovery beds — this simplifies the patient journey and cuts material and logistic demands.
- Early evidence suggests TNE can reduce use of single-use plastics (e.g. cannulas, tubing, mouthguards, syringes for sedation) compared with conventional transoral endoscopy. (RUH Bath VBP Pilot) [Transnasal Endoscopy Improves Patient Outcomes and Productivity » NHS Supply Chain](#)
- It also reduces demands on infrastructure and staffing (e.g. fewer recovery beds, less recovery area time). (Crosby et al. 2025) [Impact of introducing transnasal endoscopy on expanding diagnostic endoscopy services – PMC](#)

While precise quantification of CO<sub>2</sub> reductions per procedure is still in progress - as noted in multiple studies - the direction is clear: TNE and holistic system design offer material sustainability benefits. Desai et al. (2024) examined environmental impacts across gastrointestinal endoscopy workflows, including waste generation and energy consumption, highlighting areas for potential emission reductions.

[The Environmental Impact of Gastrointestinal Procedures: A Prospective Study of Waste Generation, Energy Consumption, and Auditing in an Endoscopy Unit](#)

The Green Endoscopy Unit thus stands not just as a technical innovation, but as a lighthouse project: an exemplar of how healthcare delivery can be reimaged to reduce carbon emissions, optimize resource use, minimize environmental harm, and uphold patient safety and clinical quality

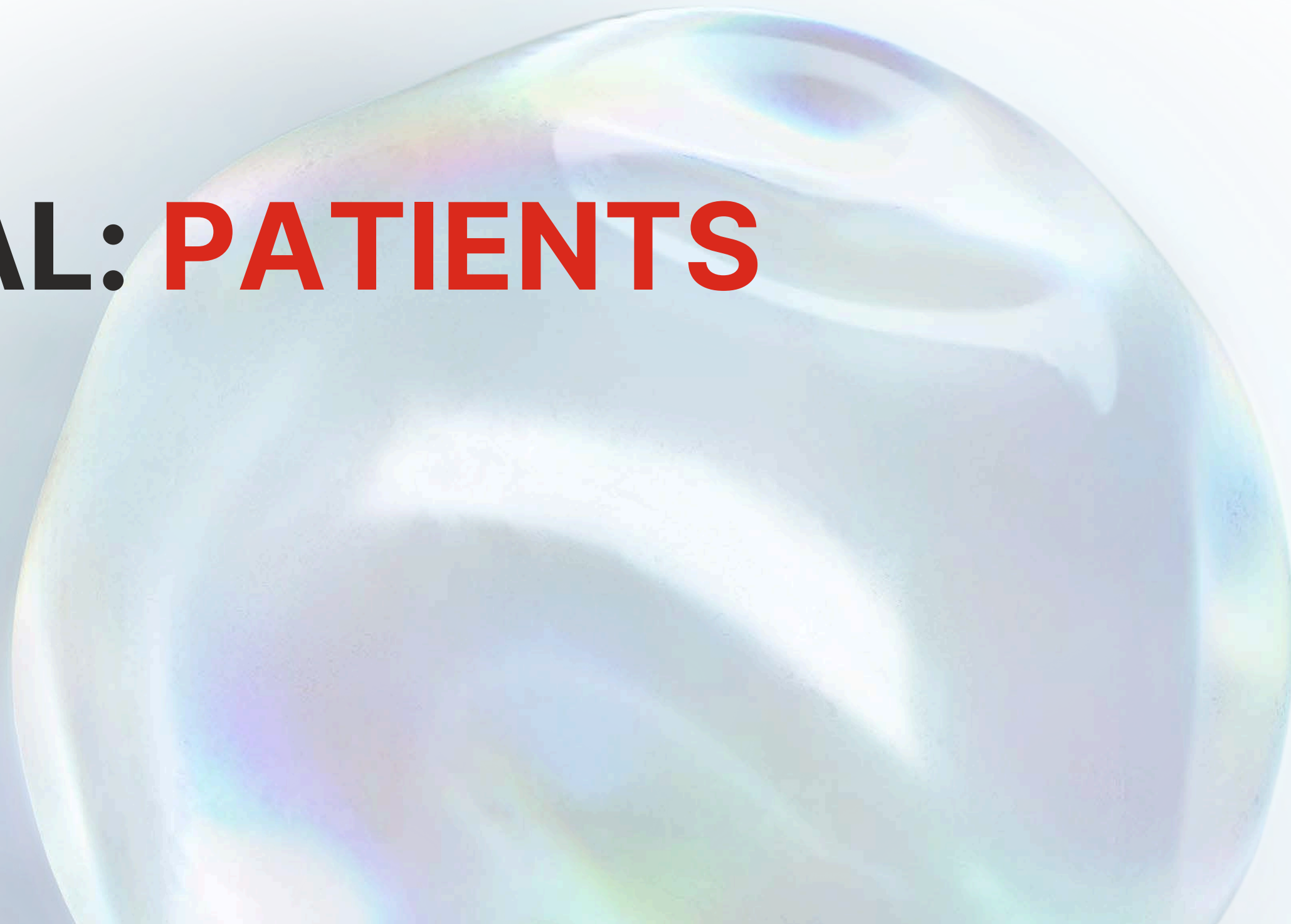
## Social

## Governance





**SOCIAL: PATIENTS**





# Patients



### Patient Focus and Product Responsibility

Aligned with our mission “We empower healthcare professionals with intuitive flexible endoscopy solutions for a better patient care”, we established our **commitment to quality, safety, and reliability**. These principles guide our approach to customer relationships and product responsibility.



### Reliability and Quality First

**Reliability and Ingenuity are two of our core values** to ensure that every product and service meet the internal and external expectations. **Improving patient quality of life with no compromise in safety and performance** is a driving force for all our efforts. The established ESG goals support our thinking beyond boundaries to find better ways to operate.



### Complaint Handling

We maintain a **transparent and responsive complaint handling system** that enables continuous improvement and strengthens customer trust. Every complaint is carefully analyzed and translated into actionable insights, always with the aim of **enhancing patient safety and product performance**.



# Patients



## Product Responsibility

We take full responsibility for the safety and performance of our products. This includes:

- **Ethical Product Development:** Designing solutions that meet medical needs while adhering to strict ethical and regulatory standards.
- **Effective Quality Assurance:** Implementing thorough verification and validation processes as well as adequate quality control measures in production.
- **Customer Safety:** Conducting risk management throughout the product lifecycle and providing comprehensive training to all relevant parties.

A key aspect of our product philosophy is ease of use. We design our products to be **intuitive and user-friendly, minimizing the risk of errors** and supporting healthcare professionals in delivering safe and effective care.

## PENTAX Medical Global Quality Policy

Our Global Quality Policy defines consistent standards across all PENTAX operations worldwide. It ensures that our products and services meet the highest expectations - regardless of market or region. This policy supports:

- **Customer Satisfaction** through consistent product performance
- **Regulatory Compliance** via harmonized processes
- **Sustainable Development** through ongoing quality improvements

By embedding these principles into our operations, we contribute directly to our ESG goals, particularly in the areas of product safety, ethical business practices, and customer well-being.



# **SOCIAL: HEALTHCARE PROFESSIONALS**



# Hygiene

## Hygiene and Infection Prevention

**Ensuring patient safety** is at the core of our mission and ESG commitments. One of the most critical aspects of patient safety is the **prevention of healthcare-associated infections**. At PENTAX Medical, we recognize that hygiene is not just a regulatory requirement - it is a moral and clinical imperative.

## A Strong Commitment to Infection Prevention

Endoscopy continues to evolve with the aim of improving clinical outcomes. However, significant opportunities remain to further enhance patient safety, particularly through improved infection prevention. In today's healthcare landscape - marked by increased environmental awareness and staffing challenges - **efficient endoscope decontamination with efficient endoscope reprocessing** is more important than ever.

## We are committed to advancing hygiene standards through:

- **Innovative Product Design:** Our endoscopes and accessories are developed with hygiene in mind, incorporating features that support thorough cleaning and disinfection
- **Optimized Processes:** We work closely with healthcare providers to streamline reprocessing workflows, reducing complexity and minimizing the risk of human error
- **Ease of Use:** Our products are designed to be intuitive and user-friendly, helping staff perform hygiene procedures correctly and efficiently - ultimately reducing infection risks

## Comprehensive Hygiene Solutions

Our portfolio of **hygiene solutions offers flexibility and precision**, enabling healthcare professionals to choose the right approach for each patient scenario. This tailored approach helps reduce the risk of cross-contamination and supports better clinical outcomes.

Importantly, by improving hygiene processes and reducing the complexity of endoscope reprocessing, we also help our customers **lower their environmental footprint**. As discussed in the Environmental section of this report, the Use Phase - particularly the reprocessing of endoscopes - is a major contributor to emissions. By offering solutions that are both safe and efficient, we **support hospitals in achieving their sustainability goals without compromising patient safety**.

## Alignment with HOYA's Product Safety Principles

As part of the HOYA Group, our **commitment to hygiene and infection prevention is aligned with the broader corporate principles of product safety and social responsibility**. HOYA emphasizes the importance of developing safe, reliable products that contribute to public health and well-being. You can read more about HOYA's approach to product safety here.



# Training

**Continuous education is essential** for improving patient outcomes, ensuring safety, and supporting sustainable healthcare practices. At PENTAX Medical, we believe that **empowering healthcare professionals through targeted training** is one of the most effective ways to drive long-term impact - clinically, ethically, and environmentally.

**Our commitment to education aligns directly with our long-term ESG goals, including:**

- Supporting the **training of young healthcare professionals** (HCPs)
- **Promoting proper use** and maintenance of endoscopes
- Encouraging **sustainable hygiene practices**

**PENTAX Medical**  
**forward**  
**ACADEMY™**



*Forward Academy EUS*



# Training



## Hygiene Training

Effective hygiene training is critical for infection prevention and patient safety. In many healthcare settings, the **responsibility for cleaning and disinfecting endoscopes lies with specialized staff** - not physicians - who often lack access to structured training programs.



### We want to address this gap by offering:

- Dedicated **hygiene curricula** tailored to the needs of reprocessing staff
- Global **training centers and partnerships** with educators to standardize best practices
- Hands-on **workshops and digital resources** that promote safe, efficient, and environmentally conscious reprocessing

By improving hygiene knowledge and workflows, we not only reduce infection risks but also help healthcare institutions **lower their environmental footprint** - especially in the Use Phase, where reprocessing is a major driver of emissions.



Expert Blog Series: The Everlasting Role of  
Reprocessing Staff and the Importance of Training



# Training

## Clinical Training for Physicians

Beyond hygiene, we are deeply committed to advancing clinical expertise in endoscopy. Through our PENTAX Medical Forward Academy™, we **connect emerging talents with experienced mentors from leading hospitals worldwide**. These programs foster excellence in technique, decision-making, and patient care.

**We also collaborate with renowned institutions such as IRCAD and GIEQs, offering:**

- Advanced **endoscopic training** for physicians at all career stages
- **Simulation-based learning** and live case observations
- **Curricula** that reflect global standards and local needs, helping reduce disparities in care
- These initiatives support our long-term goal of building a strong, well-trained community of endoscopy professionals who are equipped to deliver safe, effective, and sustainable care



*EUS Masterclass*



# IRCAD



## Strategic Partnership with IRCAD: Advancing Global Endoscopy Education

As part of our long-term commitment to improving patient outcomes and supporting sustainable healthcare systems, PENTAX Medical has established **strategic partnerships with leading global training institutions**. One of the most impactful collaborations is with IRCAD - a world-renowned center for minimally invasive surgery and endoscopic education.

This partnership reflects our ESG goals by **fostering equitable access** to high-quality medical education, supporting the **responsible use of endoscopic technologies**, and strengthening healthcare systems through **knowledge transfer**.



## IRCAD Strasbourg: The Global Hub

Founded in 1994 by Professor Jacques Marescaux, **IRCAD Strasbourg is the original and flagship center** of the IRCAD network. It has become a global benchmark for excellence in surgical education, welcoming over **8,800 surgeons** annually and hosting more than **800 international experts**. Its digital platform, **WebSurg**, is the world's largest free e-learning resource for minimally invasive surgery, with over **500,000 registered members**.

In 2023, PENTAX Medical entered a **strategic partnership** with IRCAD Strasbourg to supply complete flexible GI endoscopy systems and advanced hygiene solutions for training purposes. This collaboration ensures that **physicians train with cutting-edge equipment** in realistic clinical settings.

Physicians registering through PENTAX Medical benefit from exclusive discounts on IRCAD courses, making **high-quality education more accessible** and supporting the **development of future leaders** in endoscopy.

» **LEARN MORE**

PENTAX Medical partners up with IRCAD to enhance flexible endoscopy training and education



# IRCAD Around the World



## IRCAD Taiwan: Elevating Standards in Asia

In March 2024, PENTAX Medical Taiwan formalized a **strategic partnership** with **IRCAD Taiwan**, the largest and most advanced medical training center in Asia. This collaboration focuses on advanced flexible endoscopy and includes:

- Provision of seven PENTAX Medical towers for **hands-on ESG (Endoscopic Sleeve Gastroplasty) training**
- **Inaugural workshop** featuring live ESG procedures by international faculty, with 14 trainees and 7 expert trainers
- Second **workshop** in May 2024 for 24 residents, supported by **INSPIRA** and **IMAGINA** systems
- **Feedback** from both events highlighted the exceptional image quality, user-friendly interface, and clinical reliability of PENTAX Medical scopes

These workshops not only enhanced technical skills but also **build confidence** among emerging professionals.



PENTAX Medical Taiwan  
Partners with IRCAD  
Taiwan

## IRCAD India: Expanding Access in South Asia

In October 2024, PENTAX Medical India **partnered with IRCAD India**, located in Indore, to support training in advanced flexible endoscopy. Key highlights include:

- Deployment of **five PENTAX Medical towers** for ESG training
- **Inaugural workshop** with 15 trainees and 4 expert trainers, featuring live procedures by renowned faculty
- Strong **positive feedback** on imaging performance and usability of PENTAX Medical scopes

This partnership **strengthens regional capacity** and ensures that physicians in South Asia have access to high-quality, hands-on training.



PENTAX Medical India  
Partners with IRCAD  
India - Enhance  
Training & Education in  
Advanced Flexible  
Endoscopy



# IRCAD Around the World



## IRCAD Africa: A Vision Realized

Though officially launched in April 2025, the planning and development of IRCAD Africa were key initiatives during the reporting period. Located in Kigali, Rwanda, IRCAD Africa is the **first center of its kind on the continent**, aiming to train surgeons in minimally invasive techniques and flexible endoscopy.

PENTAX Medical is a global partner, contributing equipment and educational support. This initiative **addresses critical healthcare needs in Africa**, where the burden of gastrointestinal diseases is rising and access to specialized training remains limited.

### By supporting IRCAD Africa, we help:

- Promote **equity** in education
- Build **local healthcare capacity**
- Advance **sustainable surgical practices**

[LEARN MORE](#)

Press Release: PENTAX Medical partners with IRCAD Africa to advance endoscopy training in Rwanda



## IRCAD North America: A Global Expansion

Building on this success, PENTAX Medical is also to collaborate with IRCAD North America. This expansion reflects our ongoing commitment to strengthening surgical education worldwide and making advanced training more accessible across regions.



# Women in Endoscopy

## Supporting Women in Endoscopy: Why Representation Matters

Women remain significantly underrepresented in advanced endoscopy. In 2019, only 12.8% of fellowship matches in this field were women. This disparity is not just a matter of numbers - it reflects **deeper structural barriers**, from limited access to mentorship and leadership roles to the design of tools and workflows that may not account for the needs of all practitioners.

At PENTAX Medical, we are **committed to addressing these challenges through fair opportunity, inclusive innovation, and strategic partnerships.**

## Partnerships That Drive Change

We proudly **collaborate with leading organizations that champion gender equity** in endoscopy:

- Women in Endoscopy (WiE)
- FAIR Foundation
- WEGE – Women Empowerment in Gastrointestinal Endoscopy

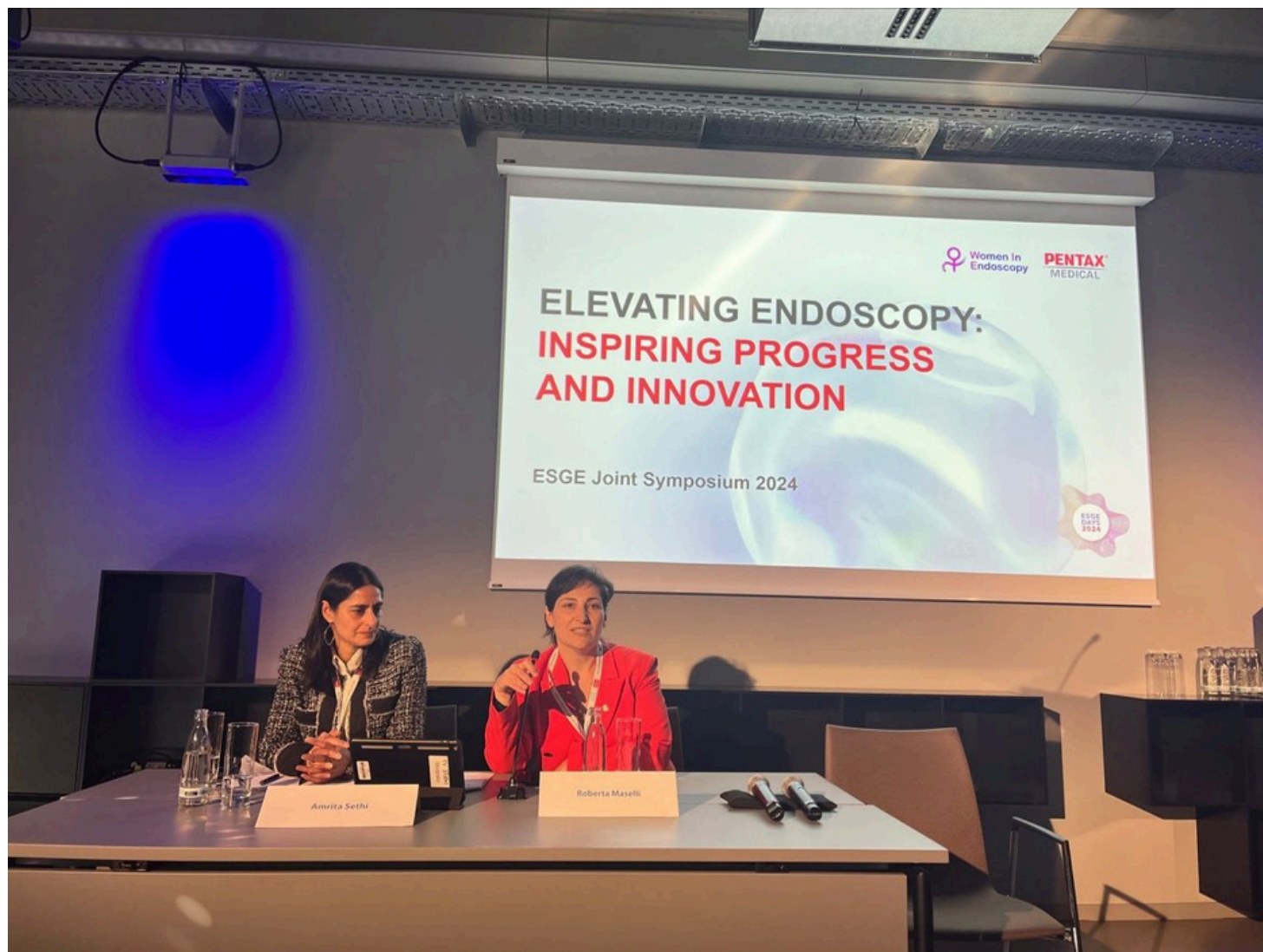
These partnerships **support mentorship, education, and leadership development** for women in the field. Our goal is not to meet quotas, but to ensure that talent and potential are recognized and supported, in line with our Fair Opportunities Policy.



EMEA celebrating Diversity and Inclusion  
on International Women's Day



# Women in Endoscopy



## ESGE Days 2024: A Platform for Visibility

At ESGE Days 2024 in Berlin, we co-hosted a symposium with Women in Endoscopy to spotlight the contributions of women in GI medicine. The session, led by Prof. Amrita Sethi and Dr. Roberta Maselli, addressed:

- **Ergonomics:** How equipment design can better support diverse users
- **Hygiene and sustainability:** Creating safe and efficient workflows
- **Leadership:** Encouraging visibility and voice for women in clinical and academic settings

This event was a powerful example of how collaboration can **elevate underrepresented voices** and drive meaningful change.

[LEARN MORE](#)[PENTAX Medical at ESGE Days 2024](#)



# Women in Endoscopy

## Thought Leadership: “Women Don’t Ask”

At the Milan Colorectal Congress 2024, **Gloria Sprovieri**, General Manager Marketing EMEA at PENTAX Medical, delivered a keynote titled “Women Don’t Ask”. Her presentation explored the **gender wage gap** in surgery and the role of **negotiation skills in closing** it.

### Key insights included:

- The **impact of social conditioning and unconscious bias** on women’s career progression
- The **importance of mentorship, sponsorship, and role models**
- Practical strategies for women to **negotiate assertively**, communicate their value, and advocate for their professional growth

*Her message was clear: **empowerment begins with awareness and action** - and companies have a responsibility to create environments where women can thrive.*



At PENTAX Medical, we aim to cultivate an environment that champions diversity, equity, and inclusion through innovations and collaboration. Every day we acknowledge and celebrate the invaluable contributions of women in our field. Our commitment to understanding and addressing these diverse perspectives motivates us to work with forward-thinking organizations like Women in Endoscopy.



*Gloria Sprovieri,  
General Manager Marketing EMEA*



**LEARN MORE**

Women Don't Ask: Closing the Gender Wage Gap in Surgery



# Women in Endoscopy

## Inclusive Innovation: Ergonomics and Equipment Design

**Inclusivity in endoscopy** also means rethinking how instruments are designed. Many endoscopic tools have historically been developed with average male hand sizes and grip strength in mind. This can lead to discomfort, fatigue, or even injury for practitioners with smaller hands - **disproportionately affecting women.**

Together with partners like Women in Endoscopy, we are exploring:

- **Ergonomic handle designs** that reduce strain and improve control
- **Customizable interfaces** that adapt to different hand sizes and techniques
- **Workflow solutions** that support efficiency without compromising comfort

As highlighted by WIE ergonomic innovation is not just a matter of comfort - it's a matter of **performance, safety, and long-term career sustainability.**

## Looking Ahead

Our commitment to supporting women in endoscopy is ongoing. Through education, advocacy, and inclusive product development, we aim to create a field where every practitioner—regardless of gender—can succeed.

*Because when we design for everyone, we improve care for everyone.*





**SOCIAL: EMPLOYEES**



# What It Means to Be Part of PENTAX Medical



At PENTAX Medical, being an employee means **being part of a purpose-driven organization** that contributes to global health and well-being. Our technologies help save lives, and our people make that possible. We are proud to offer a workplace that is **inclusive, respectful, and focused on long-term development**.

## A Human-Centered Workplace

We believe that every employee deserves fair treatment, meaningful work, and the opportunity to grow. Our Fair Opportunities Policy and Career Management Policy reflect this belief and guide our approach to employment across all regions.

## Recruitment and Onboarding

We ensure that recruitment is **fair, inclusive, and based on potential**. Job requirements are clearly communicated, and candidates are evaluated without bias. We welcome **diverse perspectives** and **actively promote representation** across teams.

## We are committed to:

- **Transparent and merit-based** hiring
- **Safe and respectful** working conditions
- **Protection** of employee rights, including freedom of expression, privacy, and dignity

**Equal access** to development opportunities, regardless of background or identity

Our policies are aligned with the **HOYA Human Rights Policy**, which affirms our responsibility to respect internationally recognized labor standards and human rights throughout our operations.

## Working Conditions

We maintain **high standards** for workplace safety, health, and well-being. Our goal is to create an environment where employees feel **secure, supported, and empowered** to do their best work.

## Employee Rights – We uphold the rights of all employees to:

- Be treated with **dignity and respect**
- Work **free from discrimination, harassment, or coercion**
- Access **fair compensation and benefits**
- Participate in **feedback** and engagement processes
- **Raise concerns** through confidential and protected channels

*These commitments are not just policies – they are part of our culture. At PENTAX Medical, employment means being part of a team that values people, purpose, and progress.*





# Respecting Rights, Building Trust



At PENTAX Medical, we believe that **strong labor relations are the foundation** of a resilient and responsible organization. Our approach is guided by the **HOYA Human Rights Policy**, which affirms our commitment to respecting internationally recognized labor standards and fostering a culture of fairness, dialogue, and mutual respect.

## Employee Rights and Human Dignity

We recognize and uphold the fundamental rights of all employees, including:

- **Freedom** of association and collective bargaining
- **Protection** against discrimination, harassment, and forced labor
- **Fair compensation** and working hours
- **Access** to grievance mechanisms and transparent communication channels

These principles are embedded in our daily operations and reflected in our policies and practices across all regions.



# Respecting Rights, Building Trust



## Fair Compensation and Benefits

We are committed to providing compensation that is fair, competitive, and aligned with local market standards. Our compensation structures are regularly reviewed to ensure **equity and transparency**. Benefits are designed to support the **well-being of our employees** and their families, including health coverage, parental leave, and retirement planning.



## Collective Bargaining and Dialogue

We respect the right of employees to **organize and engage in collective bargaining**. In regions where labor unions are active, we maintain **open and constructive relationships**, ensuring that employee voices are heard and considered in decision-making processes.



## Grievance Mechanisms

Employees have access to **confidential and protected channels** to raise concerns or report violations. These mechanisms are designed to ensure timely, fair, and respectful resolution, reinforcing our commitment to accountability and continuous improvement.



# Listening, Learning, Improving

At PENTAX Medical, we believe that **listening to our employees is essential** for building a strong, inclusive, and forward-looking workplace. Engagement is not just a value – it's a practice **embedded in our culture**.

## HOYA Employee Survey Participation

As part of our commitment to transparency and continuous improvement, PENTAX Medical participated in the **HOYA Employee Survey** in both 2022 and 2024. The survey is conducted across HOYA Group companies and provides **valuable insights** into:

- Job satisfaction and motivation
- Leadership and communication
- Inclusion and diversity
- Career development and training needs

The results help us **identify strengths and areas for improvement**, and they **inform our strategic decisions** in HR, leadership development, and organizational culture.

## Acting on Feedback

We take employee feedback seriously. Survey results are reviewed by senior management and translated into concrete actions, such as:

- **Enhancing** internal communication
- **Expanding** training and development programs
- **Strengthening** leadership capabilities
- **Promoting** a more inclusive and respectful work environment

By listening and responding, we aim to create a workplace where **every voice matters and every employee can thrive**.





# Fair Opportunities



*We believe that fairness means more than equal treatment — it means creating conditions where everyone can succeed. Our Fair Opportunities Policy ensures that all employees are evaluated based on their potential, performance, and contribution, not on labels or assumptions.*

— Fair Opportunities Policy, PENTAX Medical

## Fair Opportunities and a Fulfilling Workplace

At PENTAX Medical, we are committed to creating a workplace where fairness, inclusion, and personal growth are not just principles - they are practiced. Our approach to **Fair Opportunities is rooted in merit, respect, and the belief that every employee should have the chance to thrive**, regardless of background, identity, or personal circumstances.

## Merit-Based Selection and Advancement

We build strong teams by selecting the best people for each role — based on skills, experience, and growth potential. Our hiring and promotion processes are:

- Transparent and objective
- Free from bias or discrimination
- Focused on individual capabilities

We do not implement mandatory diversity quotas. Instead, we **foster inclusive practices** that attract and retain top talent from diverse backgrounds. This reflects HOYA's global philosophy of recruiting based on merit, not labels - regardless of nationality, gender, or other personal attributes.



LEARN MORE

Fair Opportunity Policy



# Fair Opportunities

## Supporting Representation – The Minkatsu Initiative

As part of the HOYA Group, PENTAX Medical **supports regional initiatives** that promote diversity in leadership. One such initiative is **Minkatsu in Japan**, which aims to **increase the number of women in leadership roles** across HOYA companies. The group-wide target is 18% female leaders.

In FY24, 8% of our leadership positions in Japan were held by women. For FY2025, we aim to increase this to 11%, reflecting both our support for the initiative and our belief in sustainable, quality-driven progress.

We are addressing structural and cultural factors that influence career development, ensuring that **every leadership appointment is based on capability and fit** - not numerical targets.





# Fair Opportunities

## Family-Related Leave and Work-Life Balance

A fulfilling workplace also means supporting employees in balancing their professional and personal lives. One of the most meaningful ways we do this is by **enabling and encouraging family-related leave**, especially around the birth or adoption of a child.

Spending time with a newborn is essential for bonding, emotional well-being, and long-term family stability. We recognize that this time is equally important for both parents. We are **committed to creating a culture where taking parental leave is not only accepted but actively supported**.

In FY24, **48 male and 40 female employees** took family-related leave across our global operations. These figures reflect growing awareness and utilization, but also highlight the need to further support parental leave for men, which remains underrepresented in many regions.

While we meet all **local legal requirements**, these vary significantly across countries. As part of our ESG goals for FY2025, we will:

- **Review** local parental leave policies across all regions
- **Evaluate** opportunities to exceed legal minimums in selected countries
- **Ensure** that all employees - regardless of gender - have access to parental leave without professional disadvantage

We especially want to **address the cultural and organizational barriers** that often prevent men from taking parental leave. These barriers are rarely legal - they are circumstantial. Our goal is to **ensure that 100% of male employees** have the opportunity to take parental leave if they choose to do so.

**This will require more than policy updates. We are committed to:**

- **Raising awareness** among managers and teams
- **Creating supportive processes** that make leave planning easier
- **Promoting a culture** where taking time for family is seen as a strength, not a setback



# Fair Opportunities

## Anti-Harassment and Respectful Conduct

Respecting the dignity and individuality of every employee is fundamental to our culture. In line with the HOYA Code of Conduct, we strictly prohibit:

- Sexual harassment
- Power harassment
- Discriminatory language or behavior based on race, nationality, gender, religion, belief, age, or disability

In FY24, **100% of employees participated in anti-harassment training** to raise awareness and reinforce our zero-tolerance stance. We also emphasize the **importance of preventing power harassment**, which can occur in hierarchical relationships and undermine psychological safety. We are committed to creating an environment where leadership is exercised responsibly and respectfully.

To support this, we maintain a **confidential whistleblowing and consultation system** - the HOYA HelpLine - which allows employees to report concerns or seek guidance without fear of retaliation.



## Equal Access to Development and Well-Being

We ensure that all employees have **access to career development, training, and leadership pathways**. Our policies are regularly reviewed to promote fairness and equity across all regions and functions.

We also invest in health and safety through **regular training, audits, and programs that support both physical and mental well-being**. Beyond our internal practices, we **support NGOs and governments** in improving access to medical care in underserved regions - aligning our workplace values with our broader social impact.



# Training & Development



## Empowering Growth Through Learning

As part of our long-term ESG goals, PENTAX Medical is committed to fostering a workplace where employees can grow, thrive, and shape their future. We view training not as a cost, but as a strategic **investment in people** - enabling personal development, long-term satisfaction, and organizational resilience.

Our approach to learning is grounded in the belief that **career development is a journey**, not a destination. Employees need support not only for their current roles, but also for the roles they aspire to. Whether advancing within their function or exploring new career paths, we **actively help employees acquire the skills and knowledge** they need to succeed.

In FY24, we conducted a comprehensive review of our internal training landscape. This reflection phase laid the groundwork for a new global learning framework that will be implemented in FY25. The result is **PENTAX Medical University** - a modern, inclusive, and engaging learning platform designed to meet the evolving needs of our global workforce.

## PENTAX Medical University – A New Era of Learning

**Launching in FY25, PENTAX Medical University will offer:**

- **Interactive courses** and smart learning journeys
- Role-based learning **paths tailored to individual development**
- A **global learning community** that fosters collaboration and shared growth
- **Full accessibility** across devices and regions

This initiative reflects our belief that **education should be dynamic, relevant, and empowering**. It's designed for learners of tomorrow - whether they're upskilling for their current role, preparing for future responsibilities, or exploring new ideas.





# Training & Development

## Building a Culture of Continuous Development

We are committed to creating a culture where **learning is part of everyday work**. As part of our ESG roadmap, we aim to:

- Provide **continuous learning opportunities** for all employees
- **Support career transitions** through targeted training
- Encourage **self-directed learning** and **cross-functional development**
- **Promote internal mobility** through skill-building and career planning

We are currently working to define how training activities - including e-learning, self-study, internal workshops, and external programs - can **be consistently tracked and reported**. In future reports, we plan to provide transparent metrics on training hours and participation rates.

Training is not just about performance - it's about potential. By investing in development, we **empower employees to grow with the company and contribute to a sustainable, innovative future**.





# Health & Safety



## Protecting Well-Being at Work

At PENTAX Medical, **ensuring a safe and healthy workplace** is a core part of our ESG commitment. We recognize that **physical and mental well-being** are essential for employee satisfaction, performance, and long-term engagement. Our goal is to **create an environment** where people feel secure, supported, and empowered to do their best work.

## As outlined in our long-term ESG goals, we are committed to:

- Maintaining comprehensive **workplace safety programs**
- Conducting regular health and safety **audits and risk assessments**
- Promoting employee well-being through **physical and mental health initiatives**

In FY24, we continued to strengthen our global health and safety framework. This included **regular training sessions, site-level risk assessments, and the promotion of mental health awareness**. Our programs are designed to meet or exceed local regulatory requirements, while also reflecting global best practices.

We believe that health and safety is not just a compliance issue - it's a cultural priority. By fostering a proactive safety culture, we **aim to prevent incidents, reduce risks, and support employees in all aspects of their well-being**.

Looking ahead, we will continue to **evolve our health and safety programs to reflect changing workplace dynamics, emerging risks, and employee needs**. This includes integrating health and safety into **broader ESG reporting** and ensuring that well-being remains a strategic focus across all regions.



# Employee Data Reporting



Data	FY24
Total number of employees (headcount, FTE)	2024 employees
Breakdown by contract type	<div>Number of permanent employees<ul style="list-style-type: none"><li>1288 Male</li><li>719 Female</li></ul>Number of temporary employees<ul style="list-style-type: none"><li>6 Male</li><li>36 Female</li></ul></div>
Employee Turnover (voluntary/involuntary)	<div>12,15%<ul style="list-style-type: none"><li>Those left voluntarily: 199</li><li>Those left due to dismissal, retirement or death: 47</li></ul></div>
Number of workers provided by undertaking primarily engaged in “employment activities”	2,565
Number of employees covered by collective bargaining agreements	935
Number of employees by age group	<div><ul style="list-style-type: none"><li>Under 30 years old: 262</li><li>30-50 years old: 1114</li><li>Over 50 years old: 648</li></ul></div>
Number of employees that participated in regular performance review	<div><ul style="list-style-type: none"><li>1289 Male</li><li>745 Female</li></ul></div>
Number of employees that took family-related leave	<div><ul style="list-style-type: none"><li>48 Male</li><li>40 Female</li></ul></div>

FY24 Employee Health & Safety	
Fatalities	0
Accidents	1
# Days Lost	0



# Employee Data Reporting

## HR Data Reporting

HR data reporting involves extensive data processing across multiple countries, regions, and IT systems. Collecting and consolidating this information can be complex, and at present, some data sets are not yet available. We are committed to addressing these gaps and will prepare them in FY25.

## Gender Pay Gap

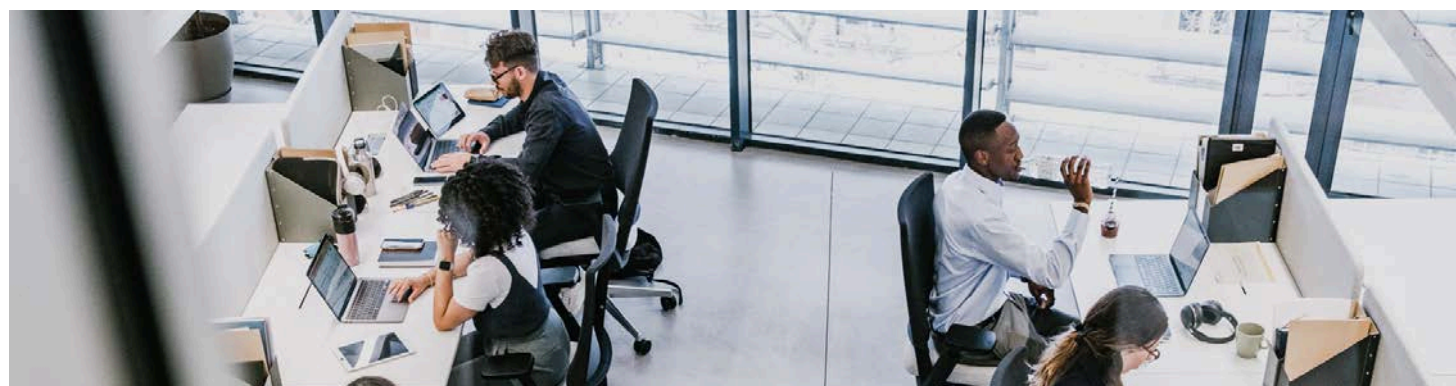
We aim to take the necessary time to fully review the data from each country, including important factors such as part-time work and length of service, before presenting comparative figures. At present, a detailed review is not possible, as we are still working on creating a holistic overview across all regions. This includes analyzing local salary levels, average pay, role profiles, and the representation of women in different professional groups, and consolidating these insights at a global level. By doing so, we will be able to evaluate the data in a fair and consistent process. HR is working on addressing this topic globally and on improving our compensation models as part of this process.

## Female/Male Managers

Similarly, we are not yet reporting the overall ratio of male and female managers. While we are committed to transparency, we are currently building a holistic overview to ensure that the data can be analyzed in a consistent and meaningful way. This work also involves reviewing local information, such as managerial structures and gender representation across regions, and combining these findings into a global perspective. For Japan, the ratio is already being reported as part of Project Minkatsu, and we aim to extend such reporting to other regions once the consolidated data is available.

## Average Training Hours per Employee

PENTAX Medical offers a wide range of trainings, including e-learning, across different IT systems, live sessions, remote trainings, voluntary trainings, and external conferences. To consolidate and document these activities more effectively, we will launch the PENTAX Medical University in FY25, providing one central platform for employees to manage their trainings and record their training hours.





# **SOCIAL: SUPPLY CHAIN**



# Supply Chain



## Supplier Responsibility: Upholding Human Rights and Ethical Standards

As part of our ESG commitment, PENTAX Medical takes a **proactive and responsible approach** to managing its global supply chain. We recognize that our impact extends beyond our own operations - and that our suppliers play a critical role in upholding the values we stand for.

We are committed to ensuring that **human rights are respected** throughout our supply network, and that all suppliers operate in accordance with **ethical, legal, and socially responsible standards**.

## Human Rights in the Supply Chain

Our **Human Rights in Supply Chain Statement** outlines our **expectations for suppliers** to respect the dignity, safety, and rights of all individuals. This includes:

- **Prohibiting** forced labor, child labor, and human trafficking
- **Ensuring** fair wages, working hours, and safe working conditions
- **Promoting** non-discrimination and equal opportunity
- **Respecting** freedom of association and collective bargaining

**LEARN MORE**[Human Rights in Supply Chain Statement](#)



# Supply Chain



We **conduct risk assessments** to identify potential human rights violations and engage directly with suppliers to address concerns. Where necessary, we take corrective actions and provide support to help suppliers meet our standards.

To increase transparency, we use tools such as **Ethixbase360** to monitor supplier practices and ensure compliance across all tiers of our supply chain.

## HOYA Supplier Code of Conduct

All major suppliers are required to **sign and comply with the HOYA Supplier Code of Conduct**, which was updated in February 2025 to reflect evolving global standards. This code sets clear expectations for:

- Legal compliance and ethical business practices
- Environmental responsibility and resource efficiency
- Respect for labor rights and workplace safety
- Anti-corruption and fair competition

Suppliers are also expected to cascade these standards to their own suppliers, ensuring that ethical practices are upheld throughout the supply chain.

- » **LEARN MORE** [HOYA Supplier Code of Conduct](#)
- » **LEARN MORE** [Human Rights in Supply Chain Statement](#)





# Supply Chain



Regular audits and inspections are conducted to verify compliance, and assistance is provided where improvements are needed. We also participate in initiatives such as the **Conflict Minerals Reporting Template (CMRT)** to ensure responsible sourcing of raw materials.

## Continuous Improvement and Collaboration

We view **supplier responsibility as a collaborative effort**. By working closely with our partners, we aim to build a supply chain that **reflects our values and contributes to sustainable development**.

Looking ahead, we will continue to **strengthen our due diligence processes, expand supplier training, and integrate ESG criteria into procurement decisions**. Our goal is to ensure that every product we deliver is backed by a **supply chain that is ethical, transparent, and aligned** with our mission to improve lives through intelligent solutions.



# GOVERNANCE





# Corporate Governance



At PENTAX Medical, we understand that **strong corporate governance and a robust compliance culture** are essential for long-term success and sustainability. As a global medical technology company and part of the HOYA Group, we are **committed to conducting our business with integrity, transparency, and accountability.**

## Why Governance and Compliance Matter

Compliance is more than a legal requirement – it is a strategic foundation for trust, innovation, and resilience. In a highly regulated industry like healthcare, it ensures that we meet the expectations of regulators, customers, and society. But more than that, it reflects who we are.

**For our customers, compliance means reliability and peace of mind.**

They know that our products and services meet the highest ethical and legal standards. **For our employees, it means clarity, fairness, and protection.** For our company, it means stability and the ability to grow responsibly.

***Integrity, one of our core values, is at the heart of our governance approach.***  
***We commit to doing the right thing – always.***



# Corporate Governance

## Governance Structure

As part of HOYA Corporation, PENTAX Medical collaborates with HOYA and has adopted HOYA framework for ESG and other initiatives, which includes:

- ESG **oversight** at the executive level
- Integration of ESG and compliance **KPIs** into executive performance evaluations

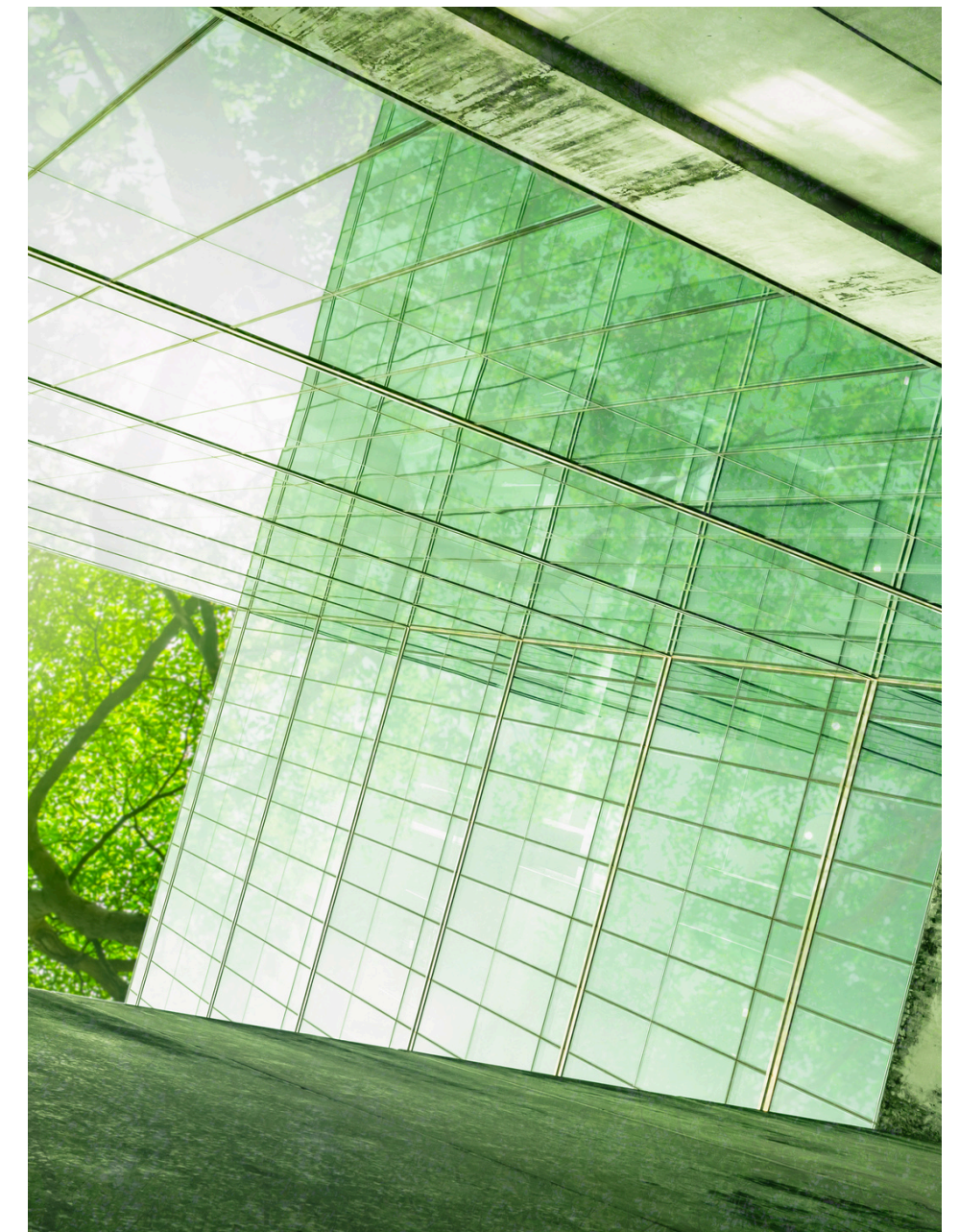
Within PENTAX Medical, **governance responsibilities are embedded** across all regions and functions. Our **Corporate Compliance Management System** ensures that policies, procedures, and controls are implemented consistently and effectively.

## Compliance and Risk Management

We maintain a **global compliance program** that includes:

- Compliance Officer with independent structure and adequate resources
- Written Policies, Procedures and standard conduct
- Effective Training and Education
- Open lines of communication for reporting concerns
- Risk Assessment
- Monitoring and Auditing
- Enforcement of standards
- Prompt response and corrective actions

Our compliance team works closely with all departments to ensure that compliance is not a barrier, but an **enabler of responsible innovation and customer trust**.





# Code of Conduct

At PENTAX Medical, **corporate governance** is not just a framework – it is a **commitment to responsible leadership, ethical conduct, and long-term value creation**. As part of the HOYA Group, we operate under a governance model that prioritizes independence, transparency, and global accountability.

Our **governance structure is aligned with the HOYA Corporate Governance Guidelines**, which ensure that decision-making is efficient, supervisory functions are independent, and operations are conducted in line with our corporate mission and values.

PENTAX Medical has adopted and implemented the **HOYA Code of Conduct**, which defines the ethical standards expected of all employees across the Group. It emphasizes:

- **Respect** for basic human rights
- **Zero tolerance** for discrimination, harassment, child labor, forced labor, and human trafficking
- **Commitment** to a safe and healthy workplace

To ensure global understanding and compliance, the Code is **translated into 27 languages** and reinforced through annual e-learning and testing for all employees. In FY24, the confirmation rate for strict adherence to the Code reached 98% across the Group.

The **Code of Conduct** is not static – it is regularly reviewed to reflect evolving societal expectations, regulatory changes, and workplace realities. It serves as the **foundation for our compliance culture** and is integrated into daily operations, training, and internal audits.

Through this framework, PENTAX Medical ensures that governance is not only about structure, but about behavior – **fostering a culture of integrity, inclusion, and accountability at every level of the organization**.



» **LEARN MORE** HOYA Code of Conduct



# Training

Code of Conduct	Duration: 5 min (certification) Completion Rate: 100% Participants: 1802
Data Privacy	Duration: 30 min (online course) Completion Rate: 100% Participants: 1802
Anti-Harassment	Duration: 30-60 min (online course) Completion Rate: 99% Participants: 1850
ESG	Duration: 30 min (online course) Completion Rate: 99% Participants: 1739
Generative AI & ChatGPT	Duration: 5 min (certification) Completion Rate: 98% Participants: 545
Conflict of Interest	Duration: 3 min (Americas online course) Completion Rate: 100% Participants: 234
Reporting Misconduct	Duration: 5 min (Americas online course) Completion Rate: 100% Participants: 234
Healthcare Professionals (HCPs) Interactions	Duration: 10 min (Americas online course) Completion Rate: 100% Participants: 234

**Compliance training is essential** to ensure that all employees understand the rules, policies, and expectations that guide our behavior. It empowers our teams to make the right decisions, recognize risks, and act with integrity – every day.

To ensure accessibility and effectiveness, we offer a mix of:

- **E-learning** modules (available in multiple languages)
- **Remote** training sessions
- **Live**, in-person workshops

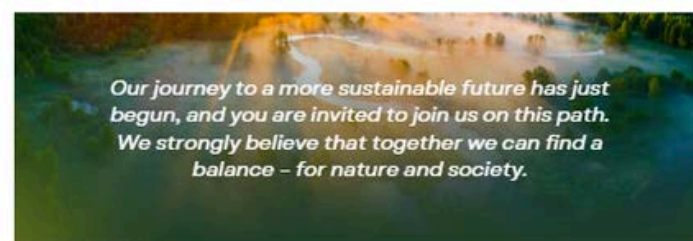
All employees are required to complete compliance training at least once per year. Completion is monitored globally, and managers follow up to ensure full participation.



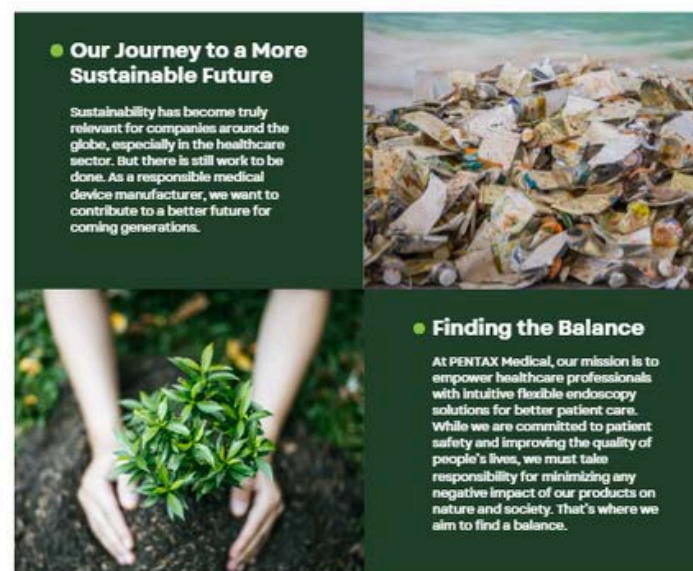
# Communication

We believe that communication is key to building a strong compliance culture. That's why **we go beyond training and policies**.

- Quarterly Compliance **Newsletters** keep employees informed about new developments, best practices, and real-world case studies
- Our **intranet** provides easy access to all relevant policies, guidance documents, and contact points



MAY 2025  
**GLOBAL ESG NEWSLETTER**  
**PENTAX**  
MEDICAL



Each year, we host **Compliance & Integrity Week** – a **global initiative** to raise awareness and engage employees in a meaningful and interactive way.

Activities include:

- **Articles** and **videos** on compliance topics
- Interactive **games** and **quizzes**
- Live **presentations** and **Q&A** sessions
- **Regional** events and **team** discussions

**ESG at PENTAX Medical**  
**A journey in progress**

Christian Wagner  
Director, EMEA Compliance Officer and global ESG Team Coordinator  
Thursday 7th November, 2024





# Anti-Corruption



**PENTAX Medical is committed to conducting business with integrity, transparency, and fairness.** As part of the HOYA Group, we adhere to the updated **HOYA Anti-Bribery and Anti-Corruption Policy** (June 2024), which reinforces our zero-tolerance stance on bribery, kickbacks, and improper payments. This policy applies globally to all HOYA entities, employees, officers, contractors, and third-party representatives. It reflects the strictest international standards, including the U.S. Foreign Corrupt Practices Act (FCPA) and the UK Bribery Act, and is designed to prevent violations regardless of local customs or practices.

Key principles include:

- **No facilitation payments**
- **No offering or accepting** of bribes, directly or indirectly
- **Due diligence** on all third-party partners, including distributors and agents
- Accurate **recordkeeping** to ensure transparency of all transactions
- Mandatory **training** for employees and relevant third parties

Each department within PENTAX Medical is **responsible for implementing controls** that reflect the HOYA global policy. These controls are subject to review by the HOYA HQ Compliance Team and may be audited by the Internal Audit Group to ensure effectiveness.



*By embedding anti-corruption safeguards into our operations, we protect our reputation, ensure legal compliance, and uphold the trust of our customers, partners, and stakeholders.*



# Payment in Healthcare



At PENTAX Medical, we recognize the **importance of maintaining the highest ethical standards** in all interactions with healthcare professionals and organizations.

The industry has undergone significant transformation over the past decades. Today, customers, regulators, and society expect full transparency and accountability. Healthcare providers want to be confident that their decisions are based solely on clinical value – not on incentives or influence.

We are **committed to ensuring that every interaction** between PENTAX Medical and members of the healthcare community is lawful, ethical, and appropriate. Our goal is to **prevent not only misconduct, but also the appearance of undue influence.**

To achieve this, we:

- **Comply** with local transparency regulations
- **Implement pre-approval processes** for engagements with healthcare professionals
- **Maintain documentation** and audit trails for all transfers of value
- **Conduct training** and awareness programs for employees and partners



Healthcare compliance is the focus of our live training sessions. Since rules and thresholds for hospitality, honoraria, and interactions with healthcare professionals vary significantly by country, **we ensure that employees receive up-to-date, localized guidance.** These sessions are designed to equip teams with the knowledge they need to act confidently and correctly in every market.

We believe that our products should be chosen for clinical excellence, patient benefit, and operational value – never for inappropriate reasons. By embedding healthcare compliance into our culture and systems, we **protect patients, support our customers, and uphold the integrity of our mission.**



# Third-Party Compliance

At PENTAX Medical, we recognize that our **responsibility for ethical business conduct extends beyond our own organization**. That is why we require all distributors, resellers, agents, and service partners to uphold the same standards of integrity and compliance that we apply internally.

Before entering into any business relationship, every distributor undergoes a structured **due diligence review**. This process ensures that we only collaborate with partners who demonstrate a clear commitment to compliance, transparency, and fair business practices. High-risk partners are subject to enhanced due diligence measures.



Our compliance expectations for third parties include:

- **Strict adherence to anti-bribery and anti-corruption laws**, including the prohibition of offering or accepting anything of value to improperly influence decisions.
- **Professional interactions with healthcare professionals and government officials**, always in line with local legislation and ethical standards.
- **Responsible handling of hospitality, meals and travel**, which must remain modest, transparent, and compliant with applicable regulations.
- **Fair competition and transparent marketing practices**, prohibiting any form of collusion, bid rigging, or unfair advantage in public tenders.
- **Accurate record-keeping and documentation**, ensuring that all interactions, contracts, and financial transactions can be verified.
- **Respect for human rights, labor standards, and environmental responsibilities**, including the prohibition of forced or child labor.

To reinforce these principles, PENTAX Medical provides **compliance training** for third-party partners, covering topics such as anti-corruption, interactions with healthcare professionals, and responsible business practices. Concerns or suspected violations can be reported confidentially through the HOYA Helpline.

By applying these standards consistently, we safeguard our customers, protect our reputation, and ensure that our values are reflected throughout the entire value chain.



# Whistleblowing System



At PENTAX Medical, we are **committed to fostering a culture of integrity, openness, and accountability**. As part of the HOYA Group, PENTAX Medical is provided with the **HOYA Helpline**, which enables employees and external stakeholders to report concerns confidentially and without fear of retaliation.

The HOYA Helpline was established in 2003 and is **available 24/7** via web access, in **multiple languages**, and with the option to report anonymously. It is designed to detect and address potential violations of laws, regulations, or the HOYA Global Code of Conduct at an early stage, ensuring swift and appropriate action.

All reports are **handled with strict confidentiality**, and **retaliation against individuals who report concerns in good faith is strictly prohibited**. The system is governed by clear operational rules in line with global compliance standards and is overseen by the Global Chief Compliance Officer (CCO).

The HOYA Helpline is open not only to employees, but also to business partners, including suppliers and distributors.

By maintaining a robust system for reporting concerns, we reinforce our commitment to ethical conduct and empower individuals to speak up when something is not right.



## FY24 Helpline Statistics

Workplace Environment	19 Cases (67.90%)
Compliance / Policy Violations	5 Cases (17.90%)
Harassment / Misconduct	3 Cases (10.70%)
Other	1 Case (3.50%)



# Risk Management

At PENTAX Medical, we recognize that **sustainability and compliance are closely connected**. To manage potential risks responsibly, we have established a **global risk assessment process** that helps us identify, evaluate, and address challenges across our operations.

This process is conducted regularly and updated whenever regulations change. Risks are assessed based on their likelihood and potential impact, taking into account existing mitigation measures as well as quantitative factors such as frequency or transaction volume. **Areas with elevated risk are prioritized for monitoring and follow-up actions.**

By embedding this **structured approach** into our decision-making, we ensure that compliance, ethics, and ESG considerations are consistently integrated into our global business – while allowing for regional adaptations where necessary.





# Data Privacy



PENTAX Medical is **committed to the protection** and responsible handling of personal data of employees, business partners, customers, and patients. Our Privacy Program includes **comprehensive data privacy measures** to ensure that personal data is collected, stored, used, processed, shared and transferred in accordance with applicable data privacy laws and in a manner that keeps that information safe. By fostering a company culture of privacy awareness, we aim to **uphold individual rights and support responsible innovation** in healthcare.

### Processing Personal Information at PENTAX Medical

PENTAX Medical only processes personal data where it is legally permitted. PENTAX Medical collects or receives personal information in a variety of ways, including directly from employees, business partners, customers, or indirectly from consumers. PENTAX Medical handles the data itself, such as through dedicated local IT servers, or may use third-party vendors to help manage the personal information.

### Internal Privacy Measures

PENTAX Medical has **implemented internal measures** to protect all personal information. All employees receive necessary training and communication with regards to data privacy.

In FY 2024, **100%** of PENTAX Medical employees were assigned and completed the **Data Privacy Training**.

### PENTAX Medical processes personal information according to the following global privacy principles:

- Lawfulness, Fairness, and Transparency
- Personal information must be processed lawfully, fairly, and transparently, with clear communication on how data is used



### Number of Information Security Incidents and Breaches

The table below shows the number of incidents and breaches globally for FY24.

Minor	1
Major	1



# THANK YOU

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