



**PROTECT, ENHANCE  
AND SAVE LIVES**

Corporate Brochure 2024

Life.  
Science.









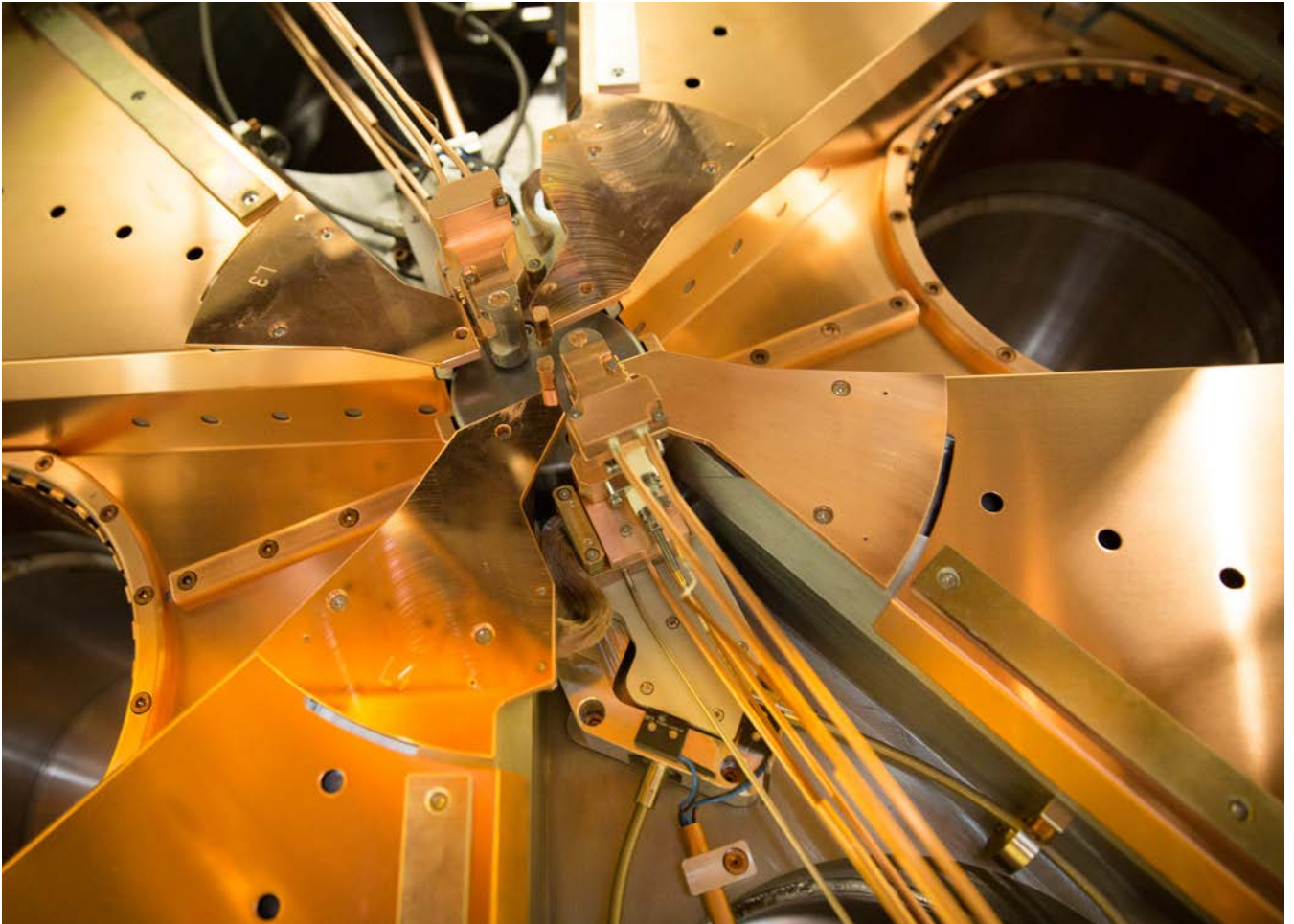


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# IBA

world leader



We are a world leader in particle accelerator technology. We design, produce and market innovative solutions for the diagnosis and treatment of cancer and other serious illnesses, and for industrial applications such as the sterilization of medical devices.

Around the world, thousands of hospitals use particle accelerators and dosimetry equipment designed, produced, maintained and upgraded by IBA, making our mission to protect, enhance and save lives true.

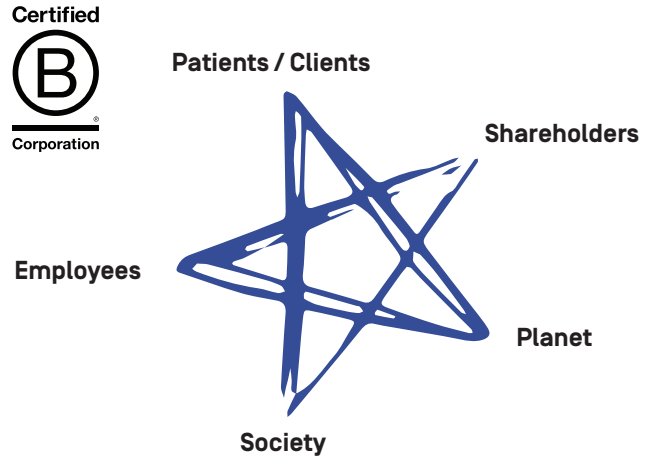
Our life-driven mission and the open relationships we have built with our customers and partners over time, together with our innovative mindset and our willingness to always strive for technological and scientific progress, make IBA a unique scientific company. We are characterized by a deep human connection that is illustrated by: Life, Science.

Through our four core activities: Industrial Solutions, RadioPharma Solutions, Proton Therapy and Dosimetry, we offer health care professionals the solutions that allow them to take a fully integrated approach to their patient care.

## How do we work?

At IBA, we believe business has the mission to be a force for good, through creating shared and long-term value for all stakeholders.

Our company is a Certified B Corporation (B Corp)<sup>TM</sup>.



### Our customers and their patients:

we develop the most effective technology for our customers so they can provide the best available diagnosis and treatment for their patients.



### Our employees:

we offer them quality jobs in a stimulating, friendly environment guided by ethical values.



### Our society:

we promote a sustainable entrepreneurial business model that serves society while respecting the limits of our planet.



### Our planet:

we continually work to address and reduce the environmental impact of our products and operations.



### Our shareholders:

we show that we are worthy of their trust by being a sound financial investment and acting in accordance with our values.

## Why do we do it?

### TO PROTECT, ENHANCE AND SAVE LIVES

For over thirty years, we have placed the purpose of the company and our project at the heart of our activities, as expressed in our mission to "Protect, Enhance and Save Lives".

All our activities are targeted towards the same objective of making a positive impact on people's health by providing health care professionals with the most effective and accurate solutions for diagnosis and treatment, as well as safe solutions for sterilization. This goal is implemented in different ways that benefit each of the different stakeholders involved.

### A FLEXIBLE AND RESILIENT BUSINESS MODEL

In today's global and increasingly volatile economy, we have demonstrated flexibility, adaptability and resilience.

These are fundamental to the continued success of our business activities.

We continue to focus on quality and innovation and, thanks to excellent sales in our businesses (Proton Therapy, Dosimetry, Industrial Solutions and RadioPharma Solutions), we are managing an increasingly larger installed base and are, as a result, focusing more on service and upgrades.

# OUR values



## CARE

We care about the well-being of our clients and patients, our employees, our society, our planet and our shareholders.



## DARE

Creativity, innovation and passion are mandatory for a company that continually stretches the frontiers of technology. Day after day, we dare to create better results.



## SHARE

We share our ideas and expertise with our stakeholders to create better results.



## BE FAIR

We implement our mission to protect, enhance and save lives through ethical standards and transparency to remain worthy of our stakeholders' trust.



# IBA in 2023

## at a glance

4

business activities

12%

of turnover invested in R&D

40

countries

5

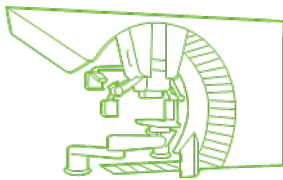
continents

70+

PT centers sold

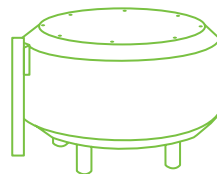
57

proton therapy service contracts



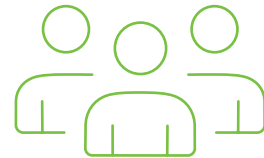
130,000+

patients treated on IBA PT equipment



670+

accelerators sold



1,986

employees

429

Million EUR revenues

B Corp 114

certified score 2024

60

nationalities

42%

proton therapy market share

# MESSAGE

## from Olivier Legrain

IBA delivered a solid performance in the second half of 2023, resulting in a positive recurring earnings before interest and taxes (REBIT) margin for the full year, as anticipated. Industrial and RadioPharma Solutions business units have had a particularly strong year, with revenues growing more than 50% and a significant increase in REBIT driven by high order intake over the past few years and accelerated

backlog conversion. Dosimetry performance was also strong, with growth in sales and REBIT, and the Services business continuing to perform well across the group. This, while Proton Therapy's performance has been affected by significant investments into the future growth of the business alongside some delays in backlog conversion.





IBA continued to progress on its four strategic sustainability streams using its B Corp certification as a tool to operationalize a stakeholder approach. The company implemented eco-design practices and launched research on environmental applications of electron-beam technology, in particular in solutions to capture forever chemicals (PFAs). A new reverse logistics process was also deployed in the US that decreased logistics CO<sub>2</sub> emissions by 96%. Alongside this, IBA completed its B Corp recertification in april 2024 with a score of 114 points, making a significant progress along our sustainability journey. In early 2024, IBA also launched Oncia Community, a public utility foundation focused on supporting access to holistic cancer care, alongside high-quality cancer treatments. The foundation has been established with the support of industrial partners and various European cancer care centers.

Looking ahead, IBA remains focused on keeping its supply chain moving and accelerating backlog conversion. Alongside this, investment is important for the business and will be executed with an agile and targeted approach. And, as we continue to drive growth, I'm pleased to announce Henri de Romrée's appointment as Deputy CEO, where he will focus on future opportunities and performance in the Other Accelerators business.

Despite the current geopolitical situation and economic uncertainties, we have a clear visibility on our future performance, and we are confident in our ability to grow in the years to come and create value for all our stakeholders.

Assuming a stabilization of global supply chain challenges, a return of inflation to around 3%, as access conditions to certain regions normalize, and based on the prospect of maintaining a high level of order intake, we have issued medium term guidance. Subject to these factors, we confirm our expectation that the annual revenue growth rate should reach an average of 15% over the 2022-2026 period. We project a recurring earnings before interest and taxes (REBIT) equivalent to about 10% of total sales by 2026, progressively delivered and weighted after 2024, as current macroeconomic effects fade and operational leverage accelerates with volume. Finally, we expect capital expenditures (CAPEX) of EUR 10 to 12 million per year until 2026 to support infrastructure development, innovation, sustainability, and digitization, to maintain IBA's cutting-edge offer and foster its future growth.

Following the results of the 2023 fiscal year, the Board of Directors intends to recommend to the Annual General Meeting the payment of a gross dividend of EUR 0.17 per share in 2024. If approved, the annual bonus paid to employees will be established at the same level as the dividend, in accordance with the company's initiative to share the value created with all its stakeholders equitably.

**Olivier Legrain**  
Chief Executive Officer

# PATIENT CARE

## what makes our heart beat

By providing innovative and high-quality solutions, IBA aims to support patients throughout their journey. As such, our mission to protect, enhance and save lives takes them from diagnosis with radiopharmaceuticals to treatment by particle beam therapy, and includes sterilization of medical equipment for safer operations and quality control of equipment.

### 01 Sterilization

Industrial Solutions is the world leader in electron and proton accelerators. Its comprehensive solutions are available for meaningful applications such as medical devices sterilization, food pasteurization, property enhancement for various materials, etc. Its pioneering E-beam and X-ray technologies enable the medical industry to be significantly more environment-friendly by avoiding toxic chemicals and radioactive materials, and their associated waste and hazards.

### 02 Diagnosis

RadioPharma Solutions develops products that are used for producing isotopes and radiopharmaceuticals, vital for use in cancer diagnosis, as well as in the cardiology and neurology fields. We assist hospitals and radiopharmaceutical product distribution centers by helping them design, build and operate their radiopharmacy units.

### 03 Treatment

IBA is the worldwide technology leader in the field of proton therapy. Proton therapy is considered to be one of the most advanced forms of radiotherapy in cancer treatments using ionizing rays. Thanks to the unique properties of protons, tumors can be targeted more accurately. In effect, protons deposit the majority of their energy in a controlled zone, limiting exposure of the surrounding healthy tissues to potentially harmful radiation.

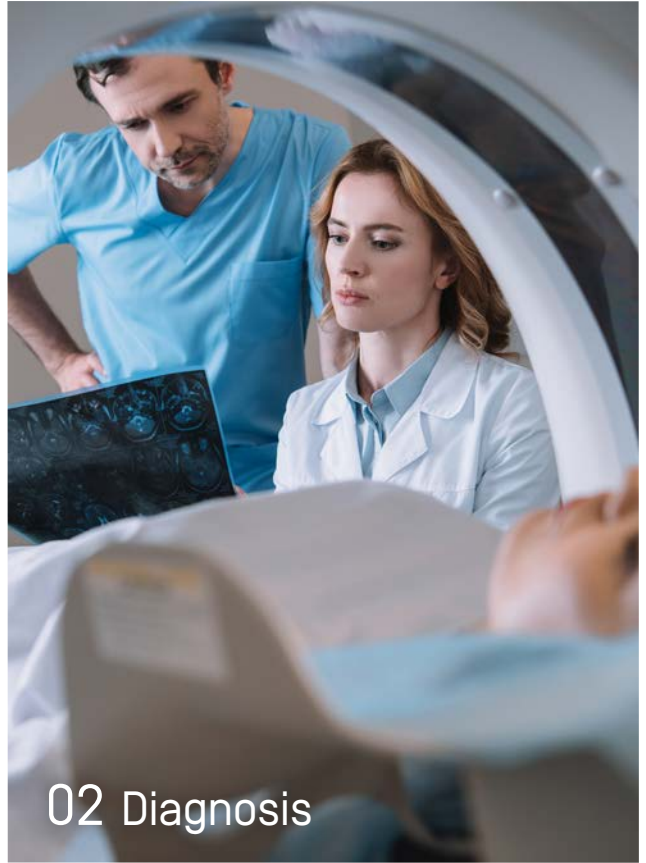
### 04 Quality assurance

The Dosimetry business offers hospitals a comprehensive range of Quality assurance tools and software, for example, for the calibration and control of their radiotherapy and radiology equipment. This technology is crucial to ensure that the prescribed dose is delivered within a precisely defined area of the patient's body. Precision and control are vital to patient safety and proper dose administration.





01 Sterilization

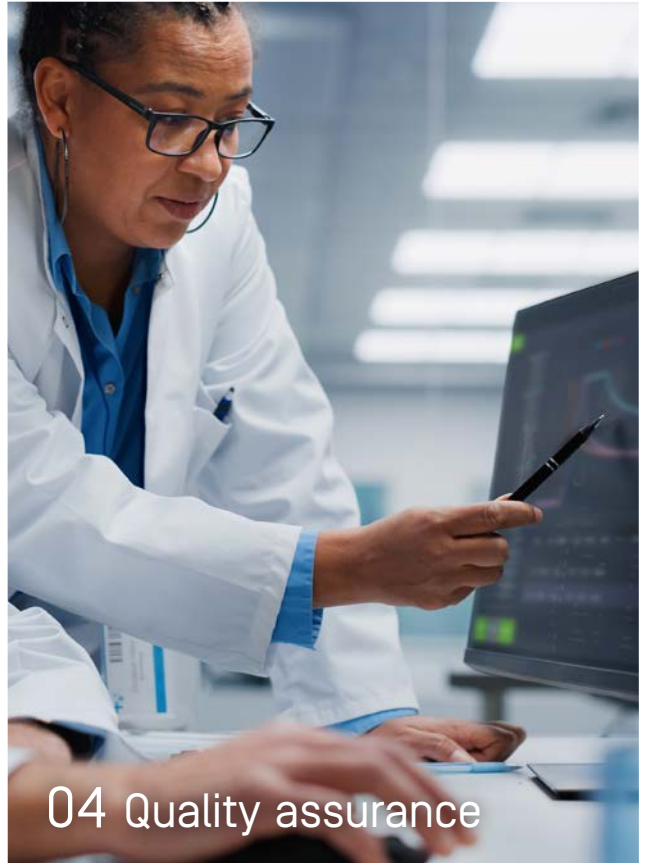


02 Diagnosis



03 Treatment

Proteus<sup>ONE</sup>



04 Quality assurance





# 01 Industrial solutions

**Protect, enhance and save lives by contributing to MORE SUSTAINABLE IRRADIATION SOLUTIONS FOR MEDICAL DEVICE STERILIZATION.**

IBA is the world leader in electron-based irradiation solutions for industrial applications. E-beam and X-ray irradiation can be used in a wide range of applications, such as food ionization or polymer cross-linking. However, IBA is more than ever focused on the medical device sterilization market. Since almost a decade, this market is in a very favorable trend, mainly due to organically increasing volumes and increasing scrutiny and scarcity of the two dominant established technologies: Gamma and ethylene oxide.

After an exceptional year in 2022, driven by COVID impacts and marked by an increased demand for integrated E-beam and X-ray solutions, the market experienced a soft landing in 2023, requiring IBA to adapt to the evolving landscape. Nevertheless, the market continues to expand on the long term, and this situation has neither reduced nor slowed down the interest in E-beam and X-ray solutions, but rather prompted IBA to further develop and enhance its products offerings and customer service.

To capture this long-term trend, IBA has developed a new portfolio of services and end-to-end solutions powered by the iconic Rhodotron®.



*Solution powered by the iconic Rhodotron®: ONE machine, MANY possibilities*

These solutions allow in-house customers or contract sterilizers to sterilize medical devices either by E-beam in boxes or X-ray in pallets, or both. They also offer an environmentally-friendly and readily available alternative to toxic chemicals such as ethylene oxide and nuclear materials such as cobalt 60.

Because it is ingrained in its DNA and because medical device sterilization is already well-established, IBA leverages its technological expertise to disrupt other key applications such as food irradiation and environmental applications.

Every initiative pursued prioritizes customers as the focal point of its vision. In line with this philosophy, IBA has established a new Customer Success team dedicated to delivering optimal service and attention to its clients.

Furthermore, in a bid to enhance proximity to its existing customer base, IBA has bolstered its regional presence in the United States by quadrupling local resources. This expansion aims to ensure superior support for customers at every phase of their journey with IBA.

## MAKING MORE ECO-RESPONSIBLE SOLUTIONS: A DAILY MISSION

The Rhodotron® electric accelerator is the most environmentally-friendly option as it avoids the use of toxic chemicals and radioactive materials, as well as the pollution and hazards associated with them. And yet, IBA's ambition is to go even further. IBA is now deploying more resources and investigating further options to ensure that the entire solution offered is part of a more eco-responsible approach.

Coupled with the latest technologies in terms of green energy production, increased efficiency of the ionization process, recovery of fatal calories, co-generation, numerical modelling, digitalization, and product handling developed for the logistics industry, irradiation can be further optimized to reduce the total ecological footprint of the sterilization industry compared to other established technologies.

## INNOVATION

In addition to enhancing its current equipments and solutions, like the so-called "variable scan", introducing innovative scanning techniques to simplify and broaden access to X-ray technology, and collaborating with its partner TRAD to develop the new Monte Carlo radiation treatment module, IBA has clearly positioned itself as a driving force in the deployment of emerging technologies for food ionization and environmental applications such as wastewater treatment and PFAS:

- IBA co-organized the International Food Ionizing Processing Symposium (IFIS) held in Texas, United States, in September 2023. With more than 100 participants, the success of the event has demonstrated the strength and interest of food ionization worldwide and has underlined the real need to forge valuable connections to drive future collaborations and help make advancements in this field.
- By leveraging high-powered ionizing technology, IBA is also actively investing in tangible solutions for environmental remediation, supported by ongoing experiments yielding promising initial results and plans for larger-scale demonstrations. IBA demonstrates that E-beam can be used for cleaner soils, air and water.



## A NEW EXPERIENCE, A JOURNEY TOGETHER, A RELATIONSHIP FOR LIFE: BEYOND™

Initially focused on the development of performant electron accelerators, IBA is now focusing on developing a wide range of services and products to serve the irradiation industry. Along with the iconic Rhodotron®, prospects and customers are now supported from their first idea to the operation of an efficient, profitable and sustainable ionization facility. This customer experience is named BEYOND™.

In the BEYOND™ experience, customers can rely on digital tools to model and optimize their product design, their future process, and model their center's performance from day one. As an example, IBA and TRAD, a French company specialized in radiation modelling, are collaborating to bring numerical simulation to a wide range of medical device manufacturers and service centers. This type of tools can potentially save months of product testing and tons of CO<sub>2</sub> during production.





Customers can also test their products while being trained at its partner site Aerial in Strasbourg, France, which is equipped with a Rhodotron® and all ionization modalities. In addition, all prospects and customers are welcome to experience and be trained on irradiation in its new academy and user experience center, the INDUX, based in Louvain-la-Neuve, Belgium.

To continue raising the bar and augment its offering, IBA increased the span of services it offers for an even more integrated irradiation facility. Prospects can now start their projects with a so-called “pre-engineering”, opt for a customized service for production ramp-up and training, and even choose financing and leasing options.



**Beyond is an experience we live together through the whole journey.**



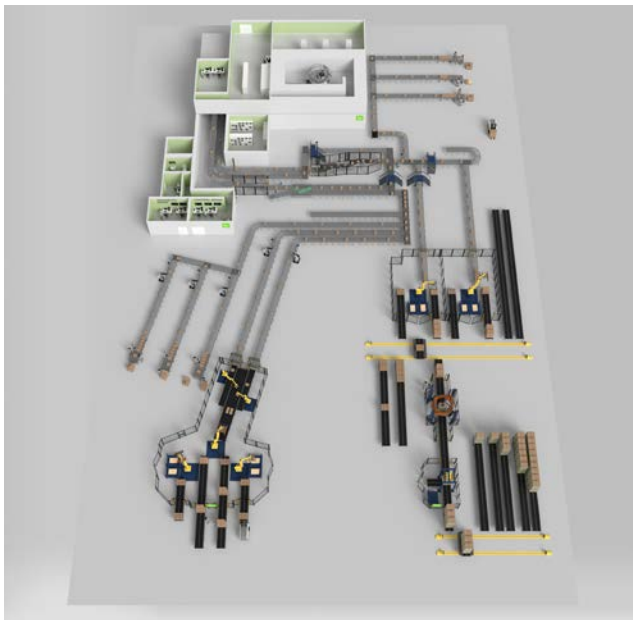
## BEYOND™, FOUR END-TO-END SOLUTIONS THAT REFLECT CUSTOMERS' AMBITION

### BE-EFFICIENT

The solution that takes advantage of the Rhodotron® power and high-end conveying solutions to treat large volumes with the highest efficiency.

### BE SOFT

The ideal solution to process fragile and high-value products that require handling with care.

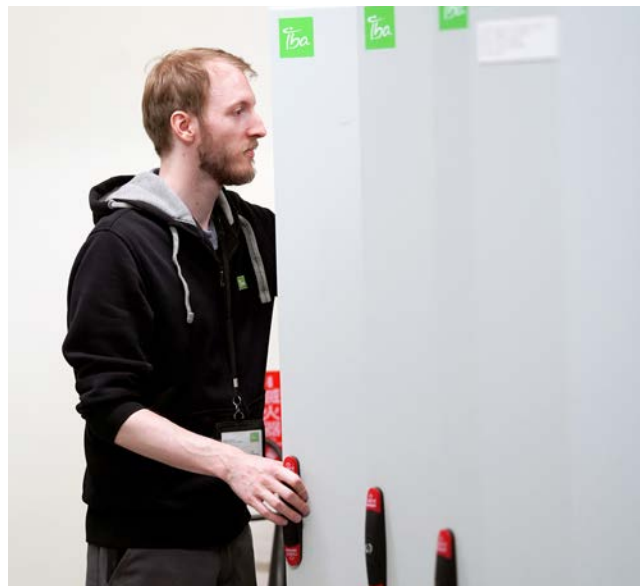


### BE-WIDE

The unique solution to irradiate pallets with X-rays with the guarantee of reaching an optimal Dose Uniformity Ratio.

### BE-FLEX

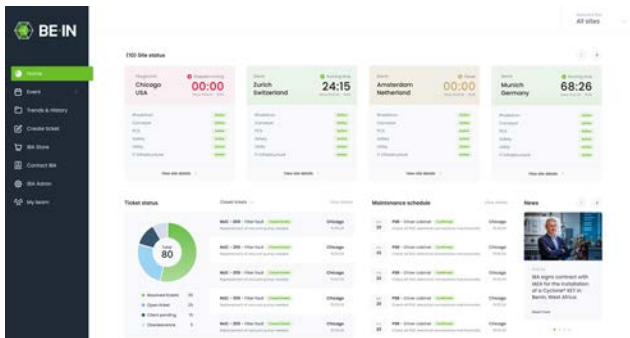
The solution for multi-purpose centers that provides the advantage of having a unique Rhodotron® to produce either E-beam or X-rays, with different energies in one or several treatment rooms.



## GETTING READY FOR THE FUTURE THROUGH DIGITALIZATION

In 2023, digitalization emerged as a pivotal focus area, marked by the initiation of several projects that have already yielded notable successes. These include:

- A comprehensive overhaul and vertical integration of Beagle, an intelligent control system designed to streamline operations within the irradiation facility.
- The introduction of Be-In, an innovative Customer Portal aimed at empowering customers with digital tools to enhance their daily operations, bolster system availability, and provide remote visual insights into machine parameters.
- Implementation of the IBA Technical Support Center (TSC) along with IBA RadioPharma Solutions and Proton Therapy. The TSC serves as an intelligent knowledge repository facilitating efficient knowledge sharing, accelerating troubleshooting processes, and fostering autonomy in problem-solving endeavors.



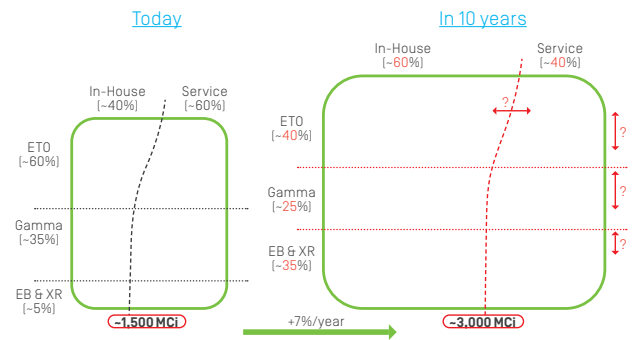
## E-BEAM AND X-RAY IRRADIATION IS RECOGNIZED AS THE SAFEST TECHNOLOGY TO HANDLE THE GROWTH OF THE MEDICAL DEVICE INDUSTRY

The medical device industry has a wide range of products that enable patient diagnosis and treatment. Within this large multi-segment industry, Disposal Medical Devices (DMD) include all single-use devices e.g., surgical gloves, dialysis tubes, diabetes patches, orthopedic implants, syringes, etc.

The medical device sterilization market is projected to double within the next decade. Additionally, there is a notable shift occurring in the distribution of sterilization methods. Previously dominated by ethylene oxide and Gamma technologies, the landscape is now transitioning towards a more equitable distribution. In particular, technologies such as E-beam and X-ray, where IBA holds a leadership position, are expected

to experience substantial growth, estimated at 5-7 times their current levels over the same period. Electron beam and X-ray irradiation offer competitive alternatives to ethylene oxide and Gamma irradiation. Both techniques are electricity based and do not present major regulation issues. Powered by green energy, both are very sustainable over more than 30 years of usage.

Moreover, this transformation is being facilitated by increased accessibility, ease of use, and reliability of the technology, prompting major players in the sector to invest more heavily in in-house resources.



## THE RISE OF X-RAY

Since the 1990s, IBA has been the pioneer of X-ray irradiation and until 2020, only one reference site in Switzerland was operational around the world. X-ray technology is now seeing a faster acceptance and utilization in all regions of the world. Several new sites were commissioned in 2023, and more than 15 new sites will be available to customers from 2027. X-ray is recognized by major sterilizers and manufacturers as the safest technology to handle the volume growth, both for businesses and for patients.

Thanks to its ambitious R&D program, which was started in 2010, the Rhodotron® based X-ray solutions are recognized as the most high-performing and sustainable product in the field. An IBA X-ray facility can treat up to 100,000 pallets and run 24/7 with a limited number of operators and only a few days of servicing per year. Through strong digitalization and sustainability programs, this performance will continue to advance and lead the market in the coming years.

In 2023, IBA has introduced a new level of X-Ray integration and automation, including robotize quality control. X-Ray represents today around 50% of the activity of IBA Industrial.

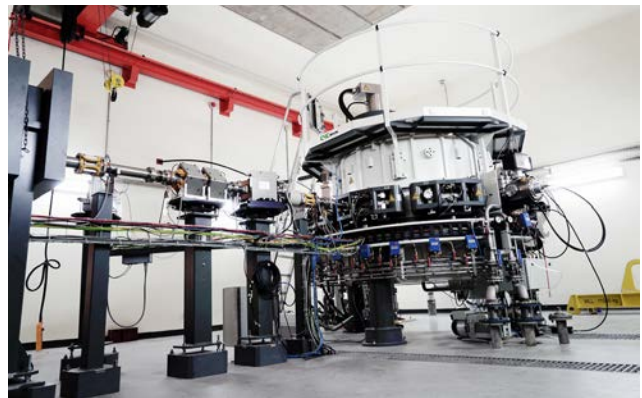


## AN EVEN FASTER GROWTH IN AMERICA AND ASIA

Until recently, reference sites for X-ray and electron beam industrial sterilization were mostly concentrated in central Europe. Today, IBA Industrial sees a strong deployment of the technology in all regions of the world, with remarkable activity in the United States, Southeast Asia and China. IBA is currently deploying a stronger regionalization plan in those areas where it is already present, including adding resources for installations and services, hubs for parts logistics, and third-party suppliers.

As indicated above, 2023 marked a major turning point in the deployment of X-ray, mainly in the United States, with several systems under final commissioning. The end of the year was also marked by the sale of a new in-house X-ray system in the United States which also reflects the changing needs of the market.

The growing interest in X-ray technology in China is also becoming more and more obvious. The Chinese market is today dominated by scattered ethylene oxide centers and more than one hundred Gamma centers. A recent symposium on X-Ray, organized by IBA with industry players in China, confirmed that industry and in-house players are ready to adopt IBA technology for a more controllable and sustainable future.



CHC provides healthcare medical solutions across Taiwan, China and South Asia. Our journey began with IBA's Proton Therapy team, leaders in the field, as we established our Proton Therapy center. We later discovered the benefits of IBA Industrial for disposable medical device sterilization and food applications.

Realizing the absence of X-ray irradiation services in Taiwan, we decided to introduce this technology. IBA's system, offering both E-beam for medical devices and X-ray for food applications, was crucial for us. Taiwan is also famous for its semiconductor industry, and we believe that E-beam technology can provide favorable results for those products.

With E-beam and X-ray treatments, we can offer faster and better solutions to our customers. We're proud to be the first globally with this dual-modality configuration, located strategically in central Taiwan. Our partnership with IBA's Proton Therapy, Dosimetry, and Industrial Business Units has been enriching. They're an innovative company, and we have proudly collaborated with them.

**Michael Lee**, Managing Director at CHC Healthcare Group









# 02

# RadioPharma Solutions

## Protect, enhance and save lives by contributing to MORE ACCURATE DIAGNOSIS

IBA leverages its extensive knowledge to assist hospitals and radiopharmaceutical distribution centers in two primary ways: by helping them produce radioisotopes in-house and by offering end-to-end solutions that cover everything from project design to facility operation.

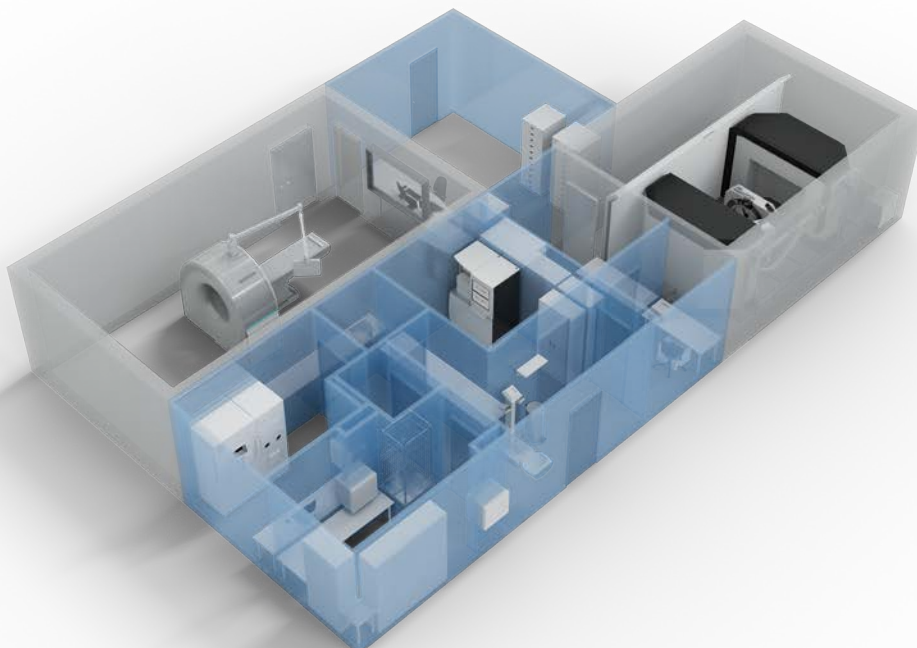
Its product range includes advanced production equipments like cyclotron solutions, targetry systems, synthesizers, control systems, and more. Moreover, IBA has gained considerable expertise in establishing cGMP radiopharmaceutical production centers.

## EARLY DETECTION SUBSTANTIALLY INCREASES THE CHANCES OF SURVIVAL

3 million undiagnosed cases of childhood cancer.

A modeling study published in The Lancet Oncology<sup>1</sup> projected cancer incidence for 200 countries worldwide and suggested that the number of undiagnosed cases of childhood cancer could account for more than half of the total in Africa, south-central Asia and the islands of the Pacific. In North America and Europe, by contrast, only 3% of cases are undiagnosed. If there is no improvement, the authors of the study estimated that more than 3 million new cases of childhood cancer would be missed between 2015 and 2030.

1. Zachary J Ward, MPH, Jennifer M Yeh, PhD, Nickhill Bhakta, MD, A Lindsay Frazier, MD, Prof Rifat Atun, FRCP, Estimating the total incidence of global childhood cancer: a simulation-based analysis. 26 February 2019. [https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045\(18\)30909-4/fulltext](https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(18)30909-4/fulltext)





## IMPROVED DIAGNOSIS ACCESS

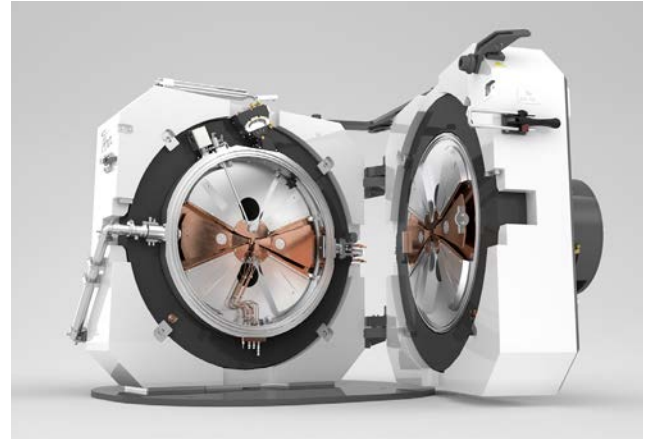
World Health Organization<sup>1</sup> [WHO] figures from 2022 indicate that 10 million people die from cancer each year, and yet patients' lives and chances of survival are significantly improved if the cancer is detected early. In fact, a cancer diagnosed at an earlier stage is more likely to be treated successfully, resulting in a higher likelihood of survival, reduction of morbidity and lower cost of care. Cancer Research UK<sup>2</sup> confirmed that the average cancer survival rate for the 8 most common cancers amongst patients with stage 1 cancer is 90%. However, the survival rate plummets to just 5% when the patient is diagnosed as having stage 4 cancer.

In light of these findings, and in keeping with its mission to protect, enhance and save lives, IBA is committed to making cancer diagnosis more accessible around the world by working on several levels:

1. By reducing the size of the radiopharmacy where the radiopharmaceutical tracers for cancer diagnosis are produced. The IntegraLab®ONE solution is the most compact radiopharmacy solution on the market, facilitating installation and reducing the building cost.
2. By increasing the cyclotron production capacity for the production of isotopes in the radioactive tracers, IBA's Cyclone®KIUBE cyclotron offers the highest production capacity enabling increased diagnostic capabilities.
3. By offering adjustable production solutions, the Cyclone®KIUBE produces the widest range of radioisotopes, enabling it to produce fluorodeoxyglucose (FDG, the most commonly used radiopharmaceutical for cancer diagnosis), Gallium-68 for the diagnosis of neuroendocrine tumors, and Copper-64 for a more accurate diagnosis of prostate cancer.



Watch the video: IBA Cyclone®Key - F-18 access granted!



Cyclone®KEY

**Cyclone®KEY is giving the opportunity to anyone, anywhere in the world to get access to PET cyclotron technology and PET imaging.**

**It's also very interesting for inhouse production because the local hospital will not depend on the big suppliers of radio-pharmaceuticals.**

**Muhammed Sarfaraz Mirza,**  
Business Line Manager,  
Attieh Medico – Saudi Arabia

The IBA Cyclone®KEY cyclotron plays an important role in making Positron Emission Tomography (PET) imaging more widely available worldwide by enabling the production of key medical isotopes used for this imaging technology.

PET imaging is a highly effective medical imaging technique that uses radiotracers to produce detailed images of organs and tissues in the body. It is used in the diagnosis and treatment of a wide range of medical conditions, including cancer, neurological disorders, and cardiovascular disease.

1. <https://gco.iarc.fr/today/data/factsheets/cancers/39-All-cancers-fact-sheet.pdf>  
2. <https://www.cancerresearchuk.org/about-cancer/cancer-symptoms/why-is-early-diagnosis-important>

However, the use of PET imaging is limited by the availability of radiotracers, which require the production of medical isotopes. The IBA Cyclone®KEY cyclotron addresses this issue by providing a compact and efficient system for the production of FDG, commonly used in PET imaging.

The Cyclone®KEY's compact size and advanced automation features make it ideal for small to medium-sized radiopharmacies and research institutions, which can use the system to produce their own radiotracers locally. This reduces the need for long-distance transportation of radiotracers, which can be expensive and time-consuming, and enables PET imaging to be more widely available in remote areas or regions where access to radiopharmaceuticals may be limited.

Overall, the IBA Cyclone®KEY cyclotron helps make PET imaging more widely available worldwide by facilitating local production of medical isotopes and reducing the logistical challenges associated with the transportation of radiotracers. This can help improve patient care by allowing more patients to have access to the benefits of PET imaging.



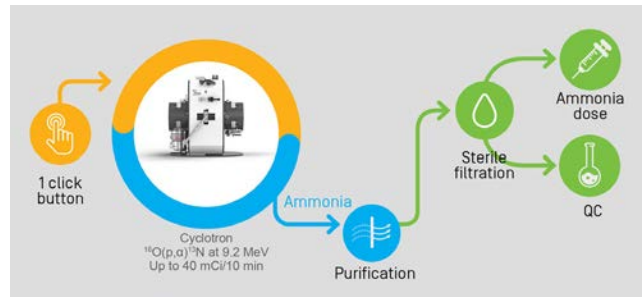
Cyclone®KEY

## PET Cardiology Diagnostic

### A PREFERRED MODALITY FOR CARDIAC IMAGING

In cardiology, a Positron Emission Tomography (PET) scan of the heart is a non-invasive nuclear imaging test using radioactive tracers. It is used to diagnose coronary artery disease and damage following a heart attack. PET scans are also used to define the best therapy treatment.

In 2023, IBA launched AKURACY, a fully integrated solution that combines PET production equipment with a streamlined production process of <sup>13</sup>N-ammonia, one of the most recognized radiotracers in cardiac imaging institutes worldwide. The system is a single button solution making it a convenient and efficient tool for on-demand production. It is designed to be operated by a trained technologist, with a ready-to-use ammonia dose produced approximately every ten minutes, resulting in a higher daily patient throughput and a better return-on-investment.



Major technological breakthroughs were achieved in the diagnosis of coronary heart disease through PET. IBA's 70MeV cyclotron enables the production of Rubidium-82, while the Cyclone®KIUBE produces <sup>13</sup>N-Ammonia — both are used for non-invasive myocardial perfusion tests.

**Cardiac PET imaging can be very useful for the management of many patients with suspected or known heart disease. Cardiac PET imaging is increasingly used as new centers are established and clinical guidelines incorporate cardiac PET imaging into the management algorithms.**

**Terrence D. Ruddy,**

MD, FRCPC, FACC, FAHA, FCCS Professor of Medicine and Radiology, University of Ottawa, Director of Nuclear Cardiology, University of Ottawa Heart Institute



Watch the production presentation video

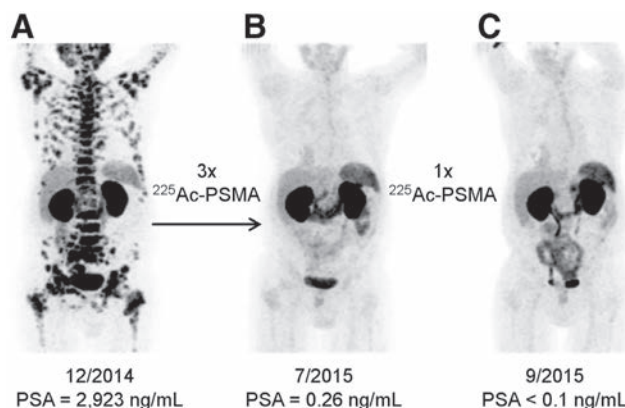
## A COMBINATION OF DIAGNOSIS AND THERAPY: THERANOSTICS

Radiotheranostics is a type of cancer treatment that combines diagnostic imaging with targeted radiation therapy. It involves the use of radiopharmaceuticals, which are compounds that contain both a radioactive isotope and a targeting molecule. These radiopharmaceuticals are injected into the patient's bloodstream and travel to cancer cells, where they can be detected using imaging techniques such as PET or SPECT. Once the cancer cells have been identified, the same radiopharmaceutical can be used to deliver a targeted dose of radiation to the cancer cells, killing them while sparing healthy tissues.

Radiotheranostics is a promising approach to cancer care because it allows for the personalized treatment of individual patients based on the specific characteristics of their cancer cells. This means that patients may experience fewer side effects and better treatment outcomes compared to traditional cancer treatments. Additionally, radiotheranostics can be used to treat a wide range of cancers, including neuroendocrine tumors, prostate cancer, and certain types of breast cancer.

Overall, radiotheranostics represents a promising avenue for cancer care that is gaining increasing attention from health care professionals and researchers alike.

As more research is conducted in this area, it is expected that radiotheranostics will continue to play an important role in the fight against cancer.



This theranostic principle has acquired greater importance in personalized medicine in recent years, particularly in oncology, where advanced tumors can potentially be treated effectively with low side effects.

## Cyclone®IKON

### NEW THERANOSTIC RADIOPHARMACEUTICALS PRODUCTION SOLUTIONS

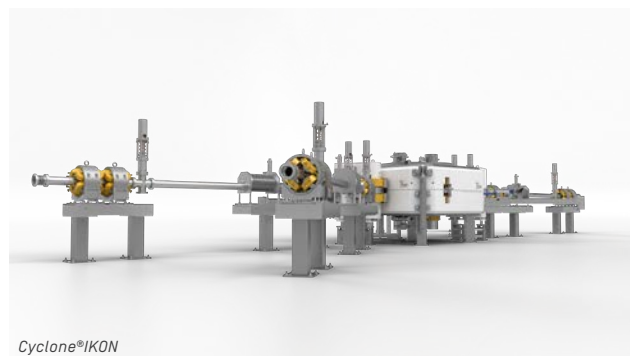
In 2021, IBA introduced its new high energy and high-capacity cyclotron, the Cyclone®IKON, which offers the largest energy spectrum for PET and SPECT isotopes from 13 MeV to 30 MeV.

Currently, there are still a large number of patients for whom cancer treatment fails, despite major scientific advances. Nuclear medicine is emerging as a relevant modality to address this gap by extending overall survival and quality of life for cancer patients. Theranostics and targeted therapies allow the administration of radiation directly to the targeted cells, with minimal toxic side effects to surrounding healthy cells, unlike traditional modalities. The growing number of clinical trials (200+) and ongoing increase of new radiotherapeutic molecule developments support the great potential of radioligand therapy.

To enable this revolution, we must enhance the availability of novel isotopes and boost their production capacity. The cyclotron must play its part as a reliable and sustainable production source of isotopes for the radiopharmaceutical industry. This is particularly the case for Germanium-68 [used for Germanium-68/Gallium-68 generators], Iodine-123 and other radioisotopes such as Copper-64, for which the demand has been consistently expanding year after year.

IBA has been a trusted partner of Curium for a long time. We selected IBA for its globally recognized expertise and due to the outstanding capabilities and reliability of the Cyclotron.

**Renaud Dehareng,**  
CEO of Curium Pharma



Watch the video:  
IBA new Cyclone®IKON.



# PANTERA

## A BETTER FIGHT FOR LIFE

PanTera is a joint-venture created by IBA and the Belgian Nuclear Research Centre SCK CEN, focusing on the development and commercialization of radiopharmaceuticals for cancer diagnosis and therapy. One of its key areas of research is the use of actinium-225, a radioactive isotope that has shown promise in the treatment of several types of cancer. Actinium-225 emits alpha particles, which are highly effective at killing cancer cells while sparing healthy tissues. PanTera is working on developing actinium-225-based radiopharmaceuticals to treat a variety of cancers, including prostate cancer and multiple myeloma.

PanTera's use of actinium-225 is part of its broader mission to bring innovative and effective cancer treatments to patients around the world. By leveraging the expertise of IBA and SCK CEN in radiopharmaceutical development and nuclear medicine, the joint-venture is well positioned to develop innovative therapies that can enhance cancer patients' quality of life.



## IBA SUPPORTS THE ONCIDIUM FOUNDATION

The Oncidium Foundation is a non-profit organization dedicated to advancing access to radioligand therapies in underprivileged communities worldwide through various initiatives, including educational programs, the creation of a worldwide community focused on supporting patients and the support of research programs.

More information on Oncidium:







# 03

# Proton Therapy

340,000 patients  
treated with PT worldwide at the end of 2023<sup>2</sup>

## Protect, enhance and save lives by contributing to MORE TARGETED TREATMENTS

Proton therapy is one of the most advanced forms of radiation therapy and a valuable treatment modality for thousands of women, men and children who are diagnosed with cancer.

Proton therapy aims to destroy cancer cells by delivering proton beams to a target tumor. Protons release the maximum energy within the tumor target area while limiting the radiation to the surrounding healthy tissues. This is not the case for photon radiotherapy, the most common type of radiation currently used in cancer therapy.

Moreover, proton therapy can potentially improve local control through dose escalation while limiting side effects and long-term complications. As a consequence, this may enhance the outcome of the treatment and patients' quality of life<sup>1</sup>.

One of the initiatives IBA Proton Therapy is currently supporting is the "PROTECTrial". The PROTECT Trial is a large-scale, multi-institutional, randomized controlled clinical trial in conjunction with 19 industry and academic partners. The consortium conducts trials in esophageal cancer with the aim of improving access to proton therapy for patients, whilst validating a model-based approach for the use of proton therapy treatment in cancer more broadly. The research project comprises 12 proton therapy centers across eight countries and is coordinated by Professor Cai Grau from Aarhus University in Denmark. IBA offers its expertise in proton therapy solutions, with six centers using IBA technology involved in the trial. A total of approximately 400 patients are expected to be included in the randomized trial with study completion planned for 2027.

It is hoped that the trial will produce high-quality data, which will contribute towards the creation of European guidelines on the use of proton therapy for esophageal cancer.

More information: <https://protecttrial.eu/>



1. Makbule Tambas et al, Radiotherapy and Oncology <https://doi.org/10.1016/j.radonc.2020.07.056>  
2. Source: PTCOG

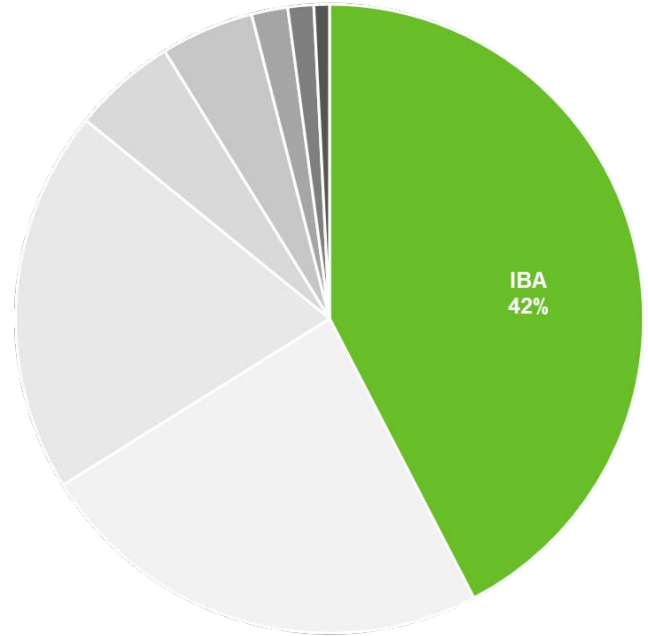


## IBA is the world leader in proton therapy

IBA is the world leader in proton therapy with IBA customers having treated more than half of all the proton therapy patients on commercial systems.

The company has been a leader in proton therapy development for the last 30 years and has built the largest user community worldwide. IBA offers maximum uptime rates and can install a system in less than 12 months.

Market share in clinical rooms [end 2023]



## IBA PROTON THERAPY CENTERS AT END OF 2023 – LARGEST NETWORK & EXPERIENCE

IBA continued to strengthen its market leadership in 2023 with the sale of several proton therapy systems: two Proteus®ONE systems to be delivered at the Sourasky Medical Center in Tel Aviv, Israel, one Proteus®ONE equipment to be supplied to the Wielkopolskie Centrum Onkologii in Poznan, Poland and a Proteus®PLUS system to be supplied by IBA's Partner CGN to the West China Hospital in Chengdu, China.

IBA also demonstrated its long-term commitment to its partners, having entered a contract with its first proton therapy system customer, for a total system restoration, bringing the latest proton therapy technologies to a center installed 25 years ago.



**Anthony Zietman,**  
Chief of Radiation Oncology, Massachusetts General Hospital, Boston, United States

34 Proteus®PLUS Centers

41 Proteus®ONE Centers

*Proteus®ONE and Proteus®PLUS are brand names of Proteus 235.*

## Campus, the most knowledgeable proton therapy community

### WHAT IS CAMPUS?

IBA is fully committed to Proton Therapy for more than 30 years. The Company has come a long way to get where it is today: at the top of the proton therapy market.

Yet, IBA could never have achieved this on its own. Everything it has accomplished is the result of the strong relationships it has built with its unique community. Because turning the world into one that is cancer-free requires a great deal of collaboration, knowledge sharing and joint research.

Campus aims to bring this collaboration to the next level. It's a place where experts, academia, researchers and entrepreneurs from all over the world have the opportunity to share knowledge with each other, and find the information they need at every stage of their proton therapy journey.

Campus is a tangible community, which meets and interacts in real life. The Campus platform is also a single repository centralizing a large amount of accumulated knowledge and expertise.

The campus community is built on 3 pillars:

- Learn to expand your skills
- Share by collaborating with your peers
- Excel to maximize your center's performance

### THE CAMPUS PLATFORM

Whether you are a newcomer willing to accelerate your learning curve, an experienced user looking to develop new expertise, or the most eminent expert keen on sharing your knowledge or expanding your research, the Campus platform is made for you. Campus it is a place where proton therapy resources are shared, covering a wide variety of topics. At the end of 2023, 436 summaries of scientific articles and more than 90 webinars were available on the platform. Content is easily searchable and continuously updated.



Join the CAMPUS platform : [campus-iba.com](https://campus-iba.com)

**IBA stands committed to advancing proton therapy education, from project inception and well into the decades ahead.**

**Aurélien Jongen,**  
Clinical Education Manager



# Keep everything but cancer with Proteus®ONE

## CREATING THE FUTURE

Proton therapy is an essential tool of precision medicine in cancer treatment, and Proteus®ONE makes this pioneering treatment more accessible than ever before. By adding proton therapy to their center’s services, cancer centers can grow and innovate alongside other leaders in this field and advance their possibilities to help even more eligible patients.

Proteus®ONE can be augmented through smart expansions whenever patient demand grows. It is also designed to be compatible with upcoming proton therapy innovations, futureproofing centers for years to come.

## THE MOST VERSATILE SYSTEM ON THE MARKET

From routine to research, Proteus®ONE’s high modularity allows customers to select the best configuration for their center, and gives physicians the flexibility to choose the best treatment option for their patients.

Physicians gain access to all the clinical benefits of Intensity Modulated Proton Therapy (IMPT) with Pencil Beam Scanning (PBS) with no compromise on patient treatment.

In addition, Proteus®ONE’s unmatched interoperability allows a flexible choice of ancillary partners. The system can also evolve to ensure short, mid and long-term value for patients, staff and the center.

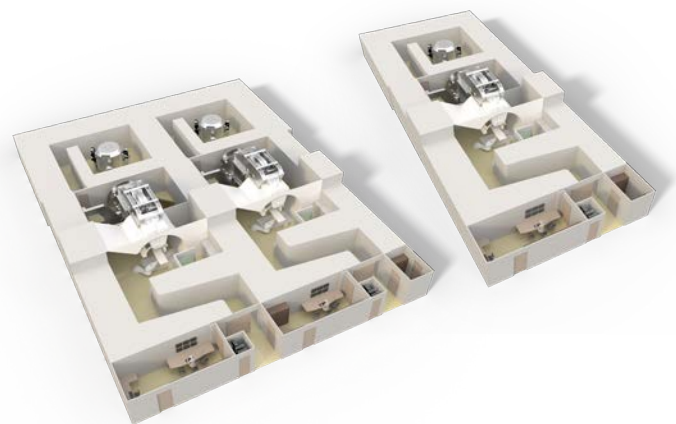
## CHANGING LIVES

Proteus® has been inspired by everyday clinical practice. Through day-to-day interactions with the community, IBA is perfectly positioned to understand, and invest in, users’ needs. These investments are directly translated into benefits for patients. The Proteus®ONE design enhances the patient experience by fostering a soothing environment while making the medical staff’s daily practice safe and easier.

## SUPPORT & SERVICES

With the largest proton therapy installed base, IBA has built a strong and reliable service team to guarantee the availability of its proton therapy technology and consistently achieve system uptime. IBA provides support teams, parts, and processes to provide full system operation and maintenance services while guaranteeing the highest performance standards on its state-of-the-art technology.

IBA understands that in order to start, maintain and grow a proton therapy center, cancer centers need an experienced partner who is there for them every step of the way. Its services provide the necessary expertise, confidence, training and support to ensure proton therapy centers are successful from the very beginning.



*Proteus®ONE is an expandable solution, and allows for maximal evolutivity both when expanding services or when upgrading existing systems.*

It’s delightful to see a young patient’s reaction when they walk into the room. It doesn’t look like a typical exam room. It looks more like a fun place where kids go to play. For our therapists, it makes the room a calmer and more enjoyable place to work.

**Dennis Varghese,**  
Chief Therapist, University of Kansas Cancer Center, United States



## At the forefront of research with DynamicARC® and ConformalFLASH®



IBA is developing a novel proton therapy delivery technique called DynamicARC®. This technique allows dynamic spot-scanning irradiation and energy switching while the gantry is rotating. It offers the advantages of Pencil Beam Scanning (PBS), the advanced characteristic of the Bragg peak with no exit dose, and the conformal delivery.

Proton arc therapy has the possibility to further improve the quality of treatment. This technological evolution will offer patients numerous advantages:

- Potentially enhanced dose conformity at the tumor level and a potential reduction of the total dose received by the patient<sup>2</sup>.
- Simplified treatment planning and delivery without performing multiple field adjustments.
- Less time in the treatment room and a maximized patient throughput thanks to an optimized workflow<sup>3</sup>.

Today, the IBA Proteus® system is the only PT system meeting all the needs in terms of beam characteristics for DynamicARC®: fast energy-layer switching time, intrinsic small beam, fast scanning, and the ability to modulate dose rate within a layer.



Proteus®ONE

Watch the video:  
Shaping the future  
of proton therapy.



1. DynamicARC® is a registered brand of IBA's Proton ARC irradiation solution currently under development phase.  
2. Ding et al, International Journal of Radiation Oncology Biology Physics 2016 [http://dx.doi.org/10.1016/j.ijrobp.2016.08.049]  
3. Data on file



FLASH is a key research area that may dramatically improve the clinical relevance of proton therapy for patients around the world. IBA is uniquely positioned to drive the development of FLASH irradiation<sup>2-3</sup>, the next major innovation expected in radiation therapy.

IBA is investing heavily in developing a novel technique using the Bragg peak called ConformalFLASH®. IBA's strategy to take FLASH today from research to a clinical version of ConformalFLASH® will take into consideration the radiobiology, clinical safety, and future streamlined workflow for FLASH.

ConformalFLASH® means:

- Combining the benefit of FLASH with the benefit of the proton Bragg peak.
- Dose delivery in 1-2 beams, with no need for multi-field delivery, dose-splitting and potentially losing the FLASH effect.
- Improved conformality due to reduced entrance and exit dose.
- 3-4 times more patients in ConformalFLASH® than shoot-through FLASH, through more eligible indications like abdominal cancers<sup>4</sup>.

As the industry leader, IBA is collaborating with several leading proton therapy centers in their pioneering research work to better understand the mechanisms of FLASH irradiation.

1. ConformalFLASH® is a registered brand of IBA's Proton FLASH irradiation solution currently under research and development phase.  
2. Diffenderfer E. et Al.; The Current State of Pre-Clinical Proton FLASH Radiation and Future Directions; Medical Physics; 2021  
3. Bourhis J. et Al.; Clinical translation of FLASH radiotherapy, Why and how?, Radiotherapy and Oncology; 2019  
4. Source: Internal IBA Models





# 04 Dosimetry

## Protect, enhance and save lives by enabling INDEPENDENT QUALITY ASSURANCE

The priority of IBA in its dosimetry activity is to ensure that patients receive a safe, accurate and reliable diagnosis and treatment.

In medical imaging and radiotherapy, radiation must be used with great caution and precision.

The prescribed dose (expressed in Gray [Gy]) must be rigorously respected, both in terms of intensity and location. Patient lives, their safety and the success of their treatment depend upon it.

In medical imaging, the objective is to reduce patient exposure to radiation, while maintaining good image quality.

In radiotherapy and proton therapy, the goal is to expose tumors with millimeter precision to a high dose of rays, while reducing the exposure to healthy tissue as much as possible.

In each case, the accuracy of the equipment and the control of the dose are of paramount importance. To achieve this, dosimetry instruments and software are needed to calibrate and control the diagnostic and therapeutic equipment.

This is the responsibility of IBA's Dosimetry business, which has developed a range of tools to calibrate radiation equipment and verify the dose of ionizing radiation that the patient absorbs during medical imaging and radiotherapy.

In 2022, IBA acquired Modus Medical Devices and added its sophisticated QA solutions to IBA's existing portfolio. The entity was rebranded as IBA QUASAR and is recognized for its advanced tools for MR image guidance and motion management capabilities.



myQA® SRS



MagicMax



Modus QA - QUASAR™ MRgRT Insight Phantom



myQA® iON provides high level of automation and an easy overview of all patient QA tasks. We added some scripts to our TPS to automatically send the DICOM data to myQA iON as soon as a plan is approved. myQA iON calculates the dose and evaluates the data during the preparation work inside the OIS automatically; this speeds up our QA. When we finish prep, the QA is ready. The Monte Carlo algorithm provides high specificity and sensitivity to capture real clinical errors. myQA iON's accuracy and performance give us high confidence in our patient QA processes. With the log file analysis, we can track the given dose of the accelerator. This happens automatically in the background.

**Dr. Stephan Dröge,**  
 Chief Medical Physicist, Lung Clinic  
 Hemer, Germany



## SAFE MEDICAL IMAGING: QUALITY ASSURANCE FOR A BETTER DIAGNOSIS

IBA quality assurance solutions for medical imaging systems such as X-ray or CT (Computed Tomography) contribute to improving image quality. This ensures a more accurate diagnosis and therapy, while also controlling the radiation dose released by the machine. Dosimetry solutions offer a complete and instant analysis of the released dose to complete the required test efficiency and with the highest precision.

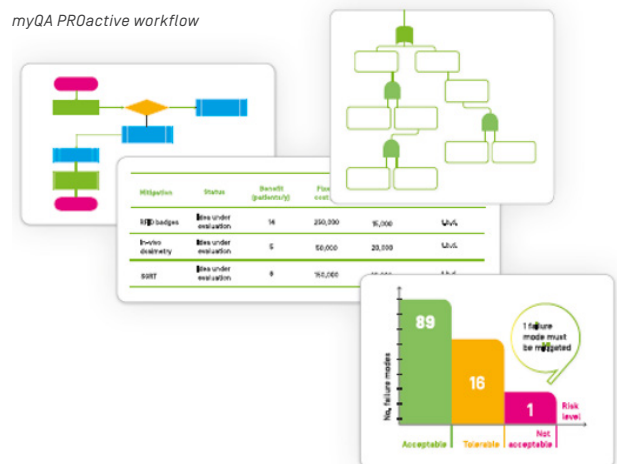
## SAFE RADIOTHERAPY: QUALITY ASSURANCE OF EQUIPMENT FOR THE TREATMENT OF PATIENTS AND INDEPENDENT VERIFICATION OF THE TREATMENT PLAN

It is vital that a series of quality control checks are made on the calibration of the equipment and the plan calculation to ensure patient safety. These controls are designed to certify that the radiotherapy and proton therapy equipment will deliver the required dose in the exact location designated by the medical team. It also increases physicians' peace of mind about their patients' safety.

## SAFE HEALTH CARE PROCESSES: DISCOVER RISKS, IDENTIFY CORRECTIVE SAFETY MEASURES AND PREVENT ACCIDENTS

Every clinic, regardless of its size, resources, and experience, can benefit from prospective risk management. myQA® PROactive enables departments to maximize safety and optimize their QA program with their available resources.

myQA PROactive workflow



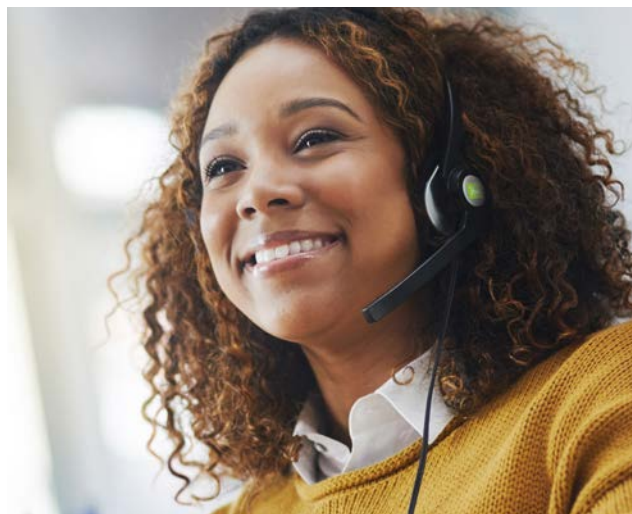


myQA<sup>®</sup> Phoenix

## PATIENT SAFETY DRIVEN BY ADVANCED CUSTOMER TRAINING AND SUPPORT

For IBA, service and support are about how the company cares for its customers and their performance.

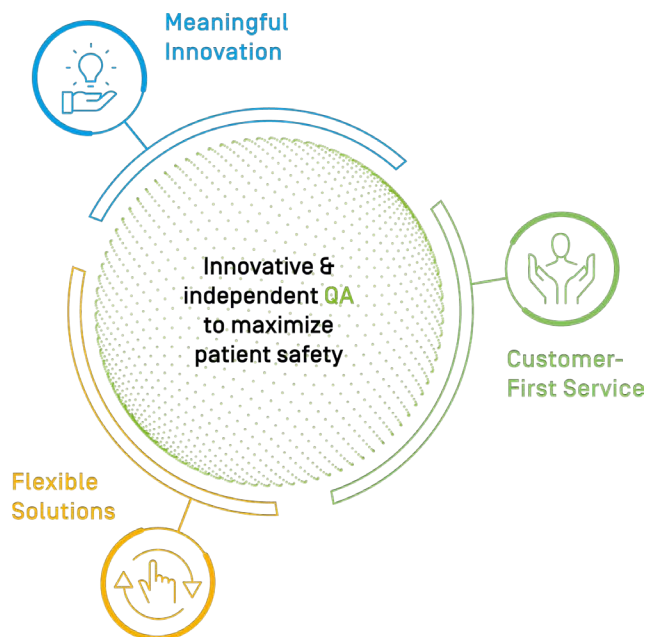
With almost 50 years of dosimetry experience, and through its training offerings, IBA helps its customers run their equipment efficiently and safely, thereby ensuring patient safety in medical imaging and radiotherapy. The qualified dosimetry service teams - uniquely distributed over 3 continents - ensure 24/7 instant access and quality support to customers.



## LEADING INNOVATIONS IN QUALITY ASSURANCE

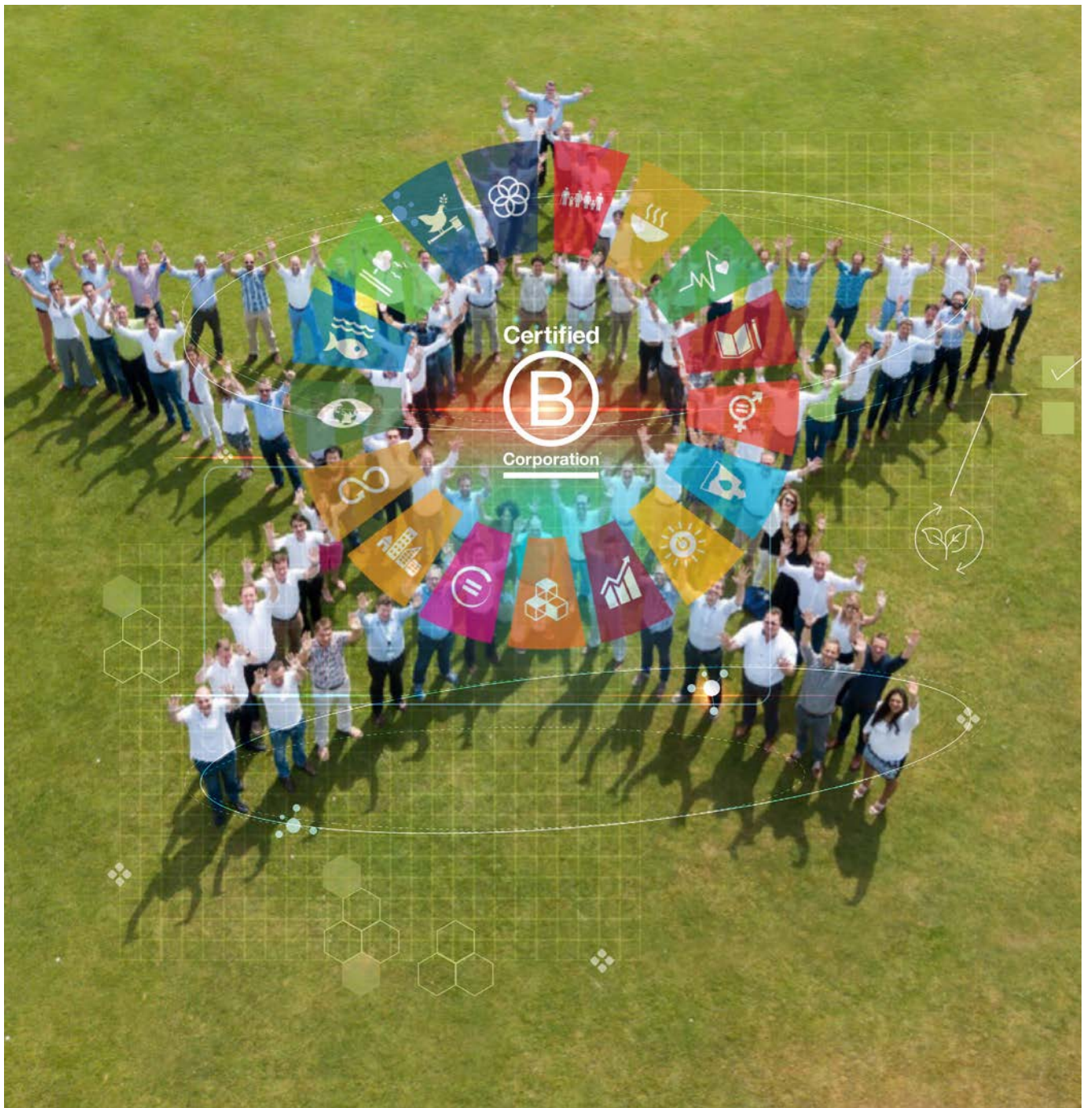
Through cutting-edge innovations, IBA has a long history of advancing Quality Assurance in radiation therapy, proton therapy and medical imaging. The company continues on this path, and believes that three drivers are essential to further innovate QA:

- Meaningful Innovation
- Flexible Solutions
- Customer-first Service





# Protect, enhance and save lives by being A COMMITTED COMPANY





We want to test our ability to operate to high social, environmental and governance standards. We took the time we needed to understand the B Corp certification, and what it means in practice for the whole Group. We've been certified since 2021, but there's still a lot of work to do. We're doing very well in terms of governance, particularly through our capital base or the fact that we pay our employees the same amount as what is allocated to shareholders. But we still need to make progress on the environmental front.

**Olivier Legrain,**  
CEO of IBA

IBA's consideration of its stakeholders lies at the heart of its entrepreneurial ethos. For, just as we are committed to our customers, patients, and shareholders, we realize that a commitment to our people, to society and to the planet is key to maintaining the quality of life of both present and future generations. Nothing less than our societal and environmental legitimacy as a company is at stake.

### BUSINESS AS A FORCE FOR GOOD

As expressed by our Stakeholder Approach, we at IBA believe in a business model that is a force for good, creating shared and long-term value for all stakeholders. We also firmly believe that being a business that is a force for good is the best business choice to attract and retain talent, stay ahead of upcoming risks, and improve the current product catalog while exploring new and growing markets.

Beyond words, we just renewed our commitment to make this a key part of our operations by recertifying for the second time as a B Corporation (or B Corp). The B Corps are part of a movement to transform companies so that they contribute to a more sustainable and inclusive economy and society, and to highlight those that reconcile profit with societal purpose.

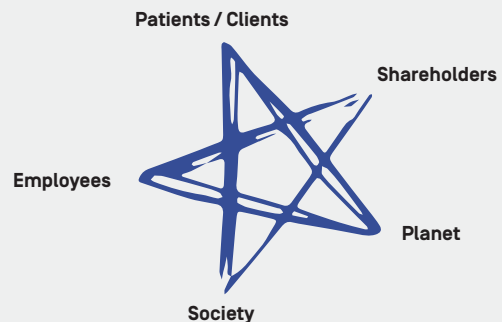
The B Corp framework is a holistic tool to assess, benchmark and ultimately improve our sustainability journey. And being a certified B Corp provides what is often lacking elsewhere: proof.

Through its recertification in 2024 at a score of 114 points (vs 90 points in 2021), IBA is strengthening its presence within the B Corp community of more than 8,000 businesses globally.



### B CORP AS A TOOL TO OPERATIONALIZE OUR STAKEHOLDER APPROACH

- **Assess:** 360° thinking to identify our strengths and improvement opportunities in 5 impact areas, based on a recognized and evolving standard.
- **Compare:** a community of 8,000+ companies worldwide, to benchmark our performance and share best practices.
- **Improve:** a framework to set milestones on our sustainability journey.
- **Advocate:** an inspiration for others, a contribution to the advancement of sustainability standards.



USING  
**BUSINESS**  
AS A  
**FORCE FOR GOOD**





## STRATEGIC AXES OF OUR SUSTAINABLE DEVELOPMENT PROGRAM

Inspired by our findings along the B Corp certification process, we mapped our strengths and weaknesses as a company. From there, we identified four sustainability strategic streams to work on during the coming years.

“As a company, we acknowledge our strengths as well as our improvement areas. Working on our weaknesses gives even more meaning to our global activities.”

**Thomas Canon,**  
IBA Sustainability Program Director

LOW CARBON, LOW WASTE PRODUCTS	Understand / reduce the CO <sub>2</sub> and waste impact of our products across their lifecycles and value chains
LOW CARBON LOW WASTE COMPANY	Monitor the IBA organization carbon footprint, zeroing it by 2030 (reduce and decarbonization contribution) Monitor the IBA organization waste footprint, reducing the unsorted part by 2/3 by 2025
DIVERSE, EQUITABLE AND INCLUSIVE WORKPLACE	Pro-actively incorporate diversity, equality and inclusion into our business as a major contributor to belonging
COMPANY ACCOUNTABLE TO SUSTAINABILITY	Enhance policies and practices pertaining to our mission, accountability and transparency Build sustainable supply chains, by screening the societal and environmental impact of suppliers

## COMMITTED TO OUR EMPLOYEES

As Yves Jongen, IBA's founder, always reminds us, our people are IBA's most valuable asset. After all, would our mission statement to protect, enhance and save lives still make sense if it isn't put into practice for and by our employees?

As a responsible employer, we want to provide our employees with safe and efficient working conditions and a friendly environment conducive to their professional and personal development.

... I am convinced that in future, talented individuals will list sustainable development as an essential criterion in their choice of employer.

**Olivier Legrain,**  
Chief Executive Officer

## AT OUR BEST

Peak performance is achieved when we are at our best. Accordingly a complete set of tools and practices is in place, covering the areas of performance management (working collaboratively), engagement monitoring (constant dialogue), learning (develop knowledge and skills) and compensation (sharing value created).





One of the ideas behind this change is that before we evaluated people and granted them a bonus on the basis of objectives they achieved. Now, we have changed the mindset and we award the bonus because we trust they are engaged and will fulfill the tasks, projects, and objectives that are required on a daily basis - and these objectives might be reviewed more often.

**Soumya Chandramouli,**  
Chief Financial Officer

## SHARING PROFITS

Our profit-sharing plan assigned to each employee matches the dividend paid to shareholders. This aligns shareholders and employees' interests with a proper balance between short-term performance and long-term goals in support of the realization of IBA's strategic commitment to its stakeholder approach.

## OFFERING FLEXIBLE BENEFITS

We believe in flexibility. In selected countries, the new MyChoice plan is designed to better align the individual value of a salary benefit with the individual needs of IBA employees. Each employee can, within set limits, use his or her « à la carte budget » to receive benefits such as complementary health insurance, multimedia, education or mobility means.

## PROMOTING A DIVERSE, EQUITABLE AND INCLUSIVE WORKPLACE

Diversity is fundamental to our culture. As an equal opportunity employer, we value the uniqueness of individuals and the different perspectives and talents they bring to IBA. We learn from and respect the cultures in which we work, promote diversity within our workforce, and have an inclusive environment that helps each and every one of us to fully contribute to IBA's success.

IBA is committed to providing equal employment and training opportunities, and to treating applicants and employees without discrimination. We do not discriminate based on race, color, age, sex, sexual orientation, national origin, religion, language, or disabilities. Our policy is that no one at IBA should ever be subject to any kind of discrimination, and we have designated individuals responsible for diversity, equality and inclusion.

Through collective intelligence initiatives, voluntary employees get involved into the development of IBA beyond their day-to-day work perimeter such as strategy, management, or specific initiatives like eco-design, biodiversity improvement, volunteering policy, or green mobility. A group of collective intelligence facilitators are trained and prepared to enhance team collaboration through tailored sessions, fostering seamless information exchange.

We also partner with external organizations such as Passwerk to leverage opportunities to make our business more inclusive.

I am really grateful for the welcome you all have given me at IBA, and for this collaboration which is for my part positive and fulfilling. Thanks for the trust you have placed in me.

Passwerk Consultant

**60** nationalities  
within IBA Group



International Women's Day at IBA Dosimetry



Keynote on burnout prevention

## COMMITTED TO HEALTH, WELLNESS AND SAFETY

Respect for universal human rights is at the core of IBA's business.

IBA is committed to providing a positive, productive, and safe work environment with freedom of association, good ergonomics and great employee facilities. We promote the prevention of involuntary labor and human trafficking, as well as the prevention of underage labor and burnout, in a work environment that is free from violence, threats, harassment, intimidation, mental or physical coercion, and other disruptive behavior.

We do not permit any form of violence, whether physical, verbal, or mental. We consider all threats of violence as serious.

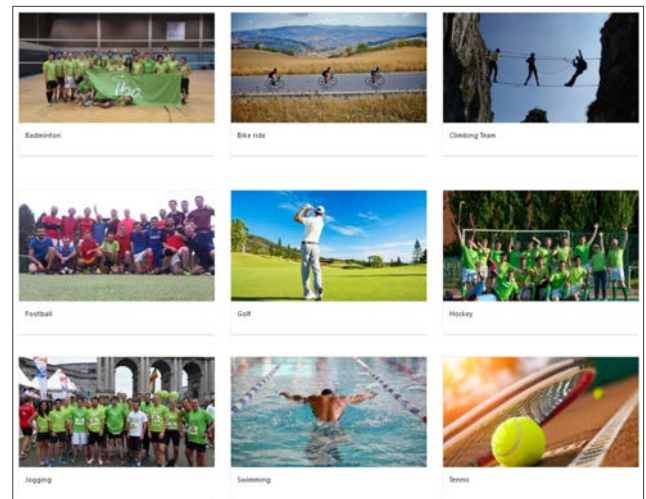
IBA is committed to implementing best practices in the field of Occupational Health and Safety to keep our promise of No Harm to our people.

To achieve this result, we:

- ensure IBA operations comply with applicable occupational health and safety regulations, and when appropriate, implement additional controls to meet company requirements.
- empower all employees to stop any activity which they judge to be hazardous and that goes against our 'No Harm' principle.

Through all steps of the development, implementation, and operation of IBA products and services, we ensure the highest safety standards for our employees.

At IBA, we recognize that time out of the office can be beneficial. We partner with local associations to offer our employees refreshing team building or individual activities during lunchtime. Social clubs are promoted by IBA and organized by voluntary employees. Climbing, golf, biking, running, hockey, photography and indoor fitness are a few of the employee clubs organized at lunchtime or after hours.



All IBA employees have access to a global high-quality Employee Assistance Program, regardless of where they live and work, providing assistance in the local language in more than 70 countries.

Through this program, practical information and counselling on a variety of topics is available to employees and their relatives, and counselling is offered at the most convenient time and location.

### ENCOURAGING LOW IMPACT MOBILITY

IBA encourages efficient, low-impact and healthy mobility. We offer attractive leasing conditions to our employees for low-impact mobility vehicles, such as electric bicycles and scooters. This is an efficient way to combine daily commuting and parking lot optimization, healthy exercise, fitness, and carbon footprint reduction.

In 2023, IBA launched a revised, fully electric car policy, together with adapted infrastructures: specific parking lots, 500 kW photovoltaic car ports and high-power charging stations. We also provide attractive conditions for employees who are willing to commute using low impact alternatives.

More than 200 bicycles are for instance under lease in Belgium and Germany, representing a more than 20% uptake by IBA staff. As a recognition of IBA's commitment, we were awarded 5 stars at the Belgian "Active Bike" challenge, ranking among the most proactive Belgian companies in this area.

**Our stakeholder approach pushes us to consider all aspects of our activities, including societal and environmental, and to involve as many people as possible in order to increase the positive impact we have on society.**

**Olivier Legrain**  
Chief Executive Officer

**+20%** of employees in Belgium and Germany have leased a bicycle





A big thank you for the greater choice offered by the new bike lease formula, for the bike allowance and the excellent infrastructure at IBA. It's a pleasure to cross the fields in the morning and then overtake the line of cars when approaching IBA.

**François,**  
an IBA biker

## COMMITTED TO SOCIETY

We firmly believe that the purpose of an economic player must be to promote social progress and collective well-being. The model we endorse - both externally and internally - goes beyond regulatory compliance: it encourages an ethical vision of practices and behavior, respect for differences and a meaningful contribution to the communities around us.



*YouthStart, an association which every year trains young people "not in Education, Employment or Training" (NEET's).*

## SUPPORTING EDUCATION

While we invest heavily in training our employees, we are also committed to educating young people. We believe that passing on our knowledge to younger generations is vital to assuring our future.

Over the long term, we will continue to support partnerships with NGOs, foundations and universities which will help improve learning and education. In 2023, IBA renewed its collaboration with Foundation for Future Generations, as a partner of the Hera Awards program, with the Philippe de Woot Awards, and with the University of Louvain by supporting the "Civil Biomedical Engineer" diploma program, enabling the Louvain School of Engineering (École Polytechnique de Louvain - EPL) to expand its range of courses.

IBA employees regularly share their experience and knowledge with universities and high schools. We have an active policy of integrating young people into professional life, by offering internships, end-of-study work, and student jobs. IBA mainly hires local employees in the countries where it has operations, creating jobs and providing wages to residents in the nearby area, and thus boosting the local economy. This is our way of making a positive contribution to the future of society at large, and of attracting new talent to IBA.

And, since 2021, we support YouthStart, an association which every year trains more than 1,000 young people "not in Education, Employment or Training (NEET's)", preparing them to enter the professional world.



Watch the video:  
Hera sponsoring.

## ENGAGING WITH OUR SUPPLY CHAIN

We believe that a strong and responsible supply chain benefits our community.

IBA has more than 100 main suppliers worldwide supporting its design and product manufacturing. The majority of IBA suppliers are located in Europe. IBA suppliers have been selected for their ability to best comply with requirements as stipulated by ISO 13485:2016. The selection and qualification process of a supplier considers the criticality of the supplied goods and services. IBA promotes technical collaboration and innovation with its partners in order to reduce risks, costs and improve the quality of its products and services. Strategic partnerships are developed whenever beneficial.

In this context, IBA releases its 'Conflict Minerals' report, and Code of Conduct for Suppliers, which outlines the minimum standards expected from its major suppliers. The Code of Conduct for Suppliers builds on, and is in alignment with, the IBA Code of Business Conduct, which all IBA employees must adhere to. Within their sphere of influence, IBA also expects suppliers to communicate the principles and to apply these minimum standards to their subcontractors and suppliers.

IBA's Code of Conduct for Suppliers follows and supports the United Nations Sustainable Development Goals (SDGs) by aligning the principles of this Code of Conduct with relevant SDGs. IBA is committed to achieving this journey together with its suppliers as equal partners.

Since 2023, we partner with Ecovadis to map the social and environmental performance of our supply chain and screen our main Tier 1 suppliers.



Golf Against Cancer

## SUPPORTING PATIENT ORGANIZATIONS

Around the world, IBA's men and women, all experts in their field, are passionate and enthusiastic about what they do. They collectively seek to play an active role in putting our mission statement into practice, "Protect, Enhance and Save Lives".

They help each patient have access to the most beneficial treatment for their cancer, and they bring more efficient and more environmentally friendly industrial technologies to our customers.

IBA also supports patients and their families, in partnership with those working in the field and by encouraging voluntary citizen actions by its employees: sponsorship, facilities sharing, donations from employee initiatives such as "Relay for Life", "FunRun", "Rock Against Cancer" or "Golf Against Cancer" events.

Associations such as "Compass to Care Childhood Cancer Foundation" in the US, "Muni Seva Ashram" in India, "La Vie-là" and "L'Essentiel" in Belgium, which support people with cancer in order to offer them a better quality of life, have also benefited from the ongoing support of IBA and its employees for many years.



Rock Against Cancer

## COMMITTED TO OUR PLANET

IBA is conscious of the current major environmental crisis. Amongst the many challenges to address, we are today specifically focusing on two: our greenhouse gas emissions and our waste. Our aim is to regularly broaden this focus to include other environmental impacts, stricter targets and ultimately restorative actions.

It was very positive to see behavior changes in the participants and their families during this challenge. Some of these changes will definitely remain.

**Augustin,**  
IBA participant to the Ma Petite Planète challenge



Soil Capital



Watch the IBA Soil Capital Partnership video.



Ma Petite Planète challenge, Winter edition 2022-23



## NET-ZERO 2030 CO<sub>2</sub> EQ

### CLIMATE

Our impact on global Greenhouse Gas (GHG) emissions is both direct and indirect:

- A direct impact through our operations: our offices and manufacturing infrastructures, and our employees' travel.
- An indirect impact through our installed product base: production at our suppliers' facilities, transport within the value chain, and, once installed at the customer's location, via electricity consumption, servicing, and decommissioning.



Inspired by the EU climate targets we have set ourselves goals for reducing our operations' net GHG emissions to zero by 2030.

This means taking action on our infrastructure and mobility impacts to reduce them by at least 50% below 2018 levels by 2030, and for the remaining part, via decarbonization contribution.

Green energy contracts are in place, and renewable energy autoproduction capacity such photovoltaic carports now enhance our headquarter facilities to further increase the ratio of low impact renewable energy consumption.



We are assessing the impact of our digital infrastructures and software usage, to better understand the carbon footprint of this ever-increasing part of modern organizations.

We have released a new mobility policy to address both the attractiveness and the carbon footprint of our employees' mobility, via incentives for low-impact transportation, mandatory electric car leasing, home working practices and a more efficient servicing organization.

Through the carbon farming project led by 'Soil Capital', IBA buys carbon certificates from local regenerative agriculture, aiding in decarbonizing regional operations. This voluntary effort boosts Wallonia's carbon farming market by backing agricultural practices that cut greenhouse gas emissions at the farm level.

**IBA's support to pay farmers for storing carbon really was a necessary condition for the success of this project.**

**Chuck de Liedekerke,**  
CEO Soil Capital LTD

Through the introduction of eco-design rules and practices, IBA also continuously reduces the CO<sub>2</sub> footprint per functional unit of its installed base by increasing the energy efficiency and reducing the mass of its product portfolio.



The Proteus®ONE proton therapy system has significantly improved energy performance thanks to the use of superconductivity.

Our RadioPharma Solutions division offers the Cyclone®KIUBE, with significantly greater compactness (less resources used) and energy efficiency.

Our Industrial Solutions division has developed the new generation Rhodotron®, the energy performance of which has greatly improved.

Upstream of the value chain, we evaluate with Ecovadis our supply chain's environmental footprint, focusing on climate impact alongside other key areas.

In 2023, IBA introduced a new process for US return logistics, opting for shared container space on ships over air transport to Louvain-la-Neuve in Belgium. Despite the longer 6-week journey, this change has led to substantial financial savings and a notable 96% reduction in CO<sub>2</sub> emissions for non-urgent shipments.

We annually monitor and publish our GHG emissions related to our installed base and to our organization worldwide: offices and production means, and employee mobility (fleet of company vehicles and professional air travel /public transport).

With a view to increasing transparency and benchmarking our practices, we disclose our environmental data every year through the Carbon Disclosure Project (CDP). IBA was awarded a B score in 2023, and is part of the "management level" class of companies taking coordinated action on climate issues.

## WASTE

IBA also has an impact on waste production:

- A direct impact through our operations: offices and manufacturing processes.
- An indirect impact through our installed product base: production processes at our suppliers' facilities, transport within the value chain, and, once installed at the customer location, servicing and decommissioning.

We have set ourselves targets for reducing our unsorted waste intensity by a factor of 3x below 2018 levels by 2025.

This will be achieved by making changes at all levels impacting our logistics, manufacturing and offices. Product packaging, for instance, is being continually improved to reduce its overall environmental impact. Recently, the warehouse team replaced a machine using non-recyclable materials with three new ones utilizing recovered or recycled materials. These include a padding machine for reusing cardboard boxes, an air cushion machine minimizing plastic waste, and a paper compression machine utilizing recycled paper.



Through the introduction of eco-design practices, our product development processes implement the principles of circularity – avoid, reduce, reuse, recycle. All products from the four business lines, namely Proton Therapy Solutions, RadioPharma Solutions, Dosimetry Solutions, and Industrial Solutions are designed to facilitate maintenance and servicing. A circular process to return defective or surplus parts deployed to our customers is now in place, for repair, resale or recycling.

Additionally, IBA has demonstrated its focus on extending the lifetime of its products, having entered a contract with its first proton therapy system customer for a total system restoration, bringing to a center installed 25 years ago the latest proton therapy technologies. Similar refurbishment of a Rhodotron® installation, ensuring it meets the latest industry standards and extending its operational lifetime, or relocation and recommissioning of a RadioPharma Solutions accelerator, further exemplify IBA's commitment to prolonging the lifespan of its products and minimizing waste.

Our Rhodotron® industrial solutions allow in-house customers or contract sterilizers to sterilize medical devices by E-beam, offering a readily available and green alternative to gases such as ethylene oxide, and nuclear materials such as cobalt-60, hence avoiding associated hazardous waste and pollutants.

IBA has also developed "low activation" concrete, which significantly reduces the amount of waste to be reprocessed during the future dismantling of the casemates hosting its accelerators, and therefore costs and environmental impact. This concrete was also used during the construction of our new headquarters.

As for carbon emissions, to better manage the outcome of our actions, we monitor and publish our waste emissions related to our worldwide operations.

## BIODIVERSITY

IBA also has an impact on biodiversity:

- A direct impact through our operations: offices and manufacturing facilities.
- An indirect impact through the waste generated by our operations indirect impact through the waste generated by our operations.

In partnership with Natagora, we have set targets for labelling our main facilities 'Réseau Nature Entreprise'. This aims to develop biodiversity in our workplace by taking actions that benefit nature. Various measures have been implemented to support biodiversity, such as green roofs, planting native species and differential mowing to reduce our ecological footprint. A pilot micro-compost of green waste is now in place, in partnership with a local company to test and hopefully develop this innovative practice around our facilities.



## MATERIALITY AND REPORTING

To clarify its priorities, IBA maintains a materiality assessment based on a dialogue with its stakeholders and the reference framework recommended by the Global Reporting Initiative (GRI).

It is in this broad area that we are concentrating our efforts, with the hierarchy of our priorities obtained by aligning the concerns of the company (outside in view) with the interests of our stakeholders (inside-out view).

This results in a materiality matrix that takes into account data from the ongoing dialogue that IBA has established with all its stakeholders, through formal and informal exchanges and from publications on environmental issues.

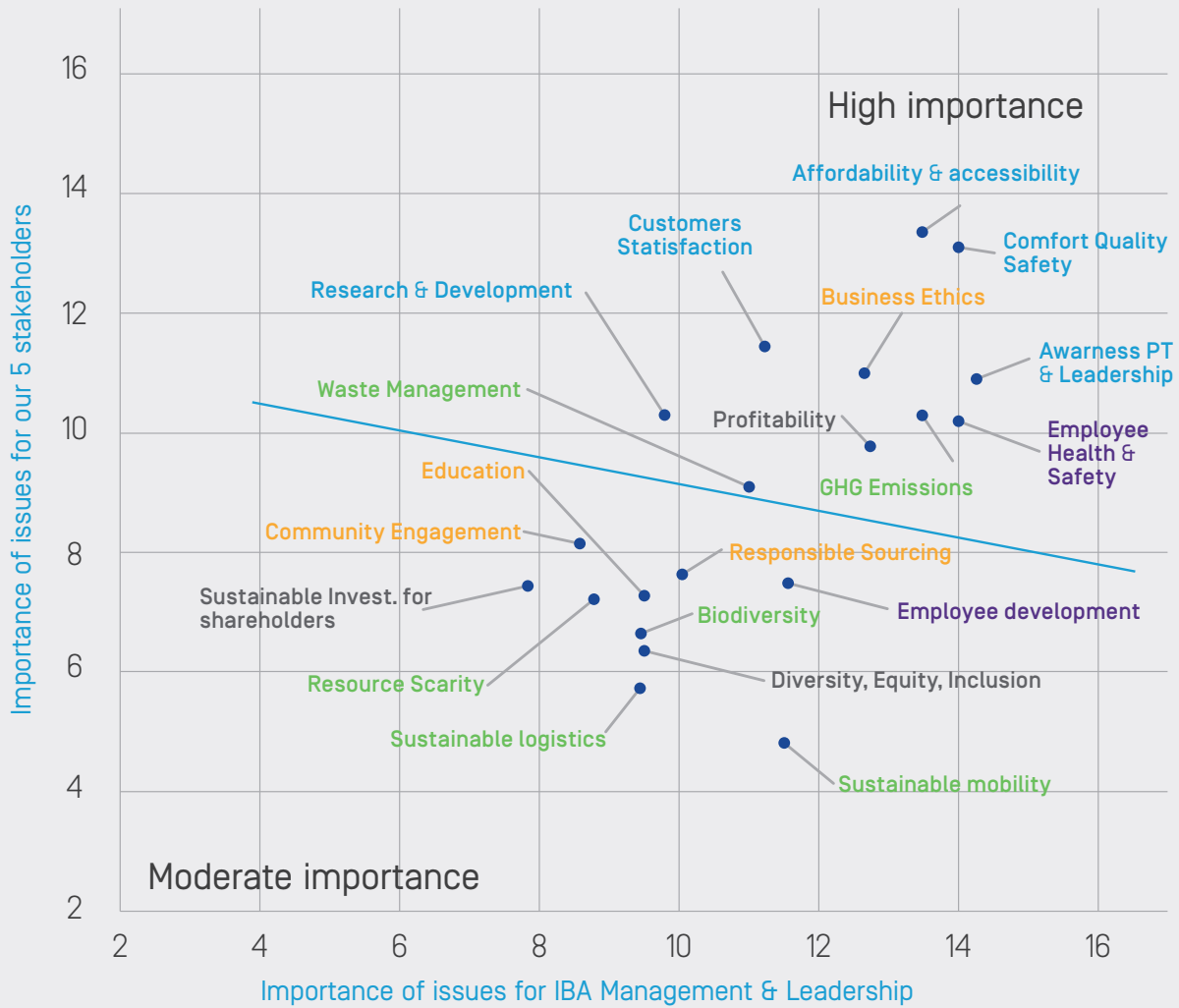
For more information on our yearly results, please refer to the GRI Index in our annual report.





## Materiality Matrix

GRI 102-46 MATERIALITY MATRIX





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