

# Focusing on sustainability in MR solutions



SIGNA™ Victor



GE HealthCare

# Creating a more sustainable future requires us to care for the planet and its inhabitants

It is essential that we continue to drive progress toward early, precise, and accessible diagnosis and treatment of more patients. For the planet, it is critical that we do so with a reduced impact on precious and rare resources that are imperative to life. We believe that the advancement of precision medicine, greater digitization of healthcare, and increased access to quality care are fundamental to accomplishing this goal.

We support carbon policies that reduce greenhouse gas emissions and promote sustainable development. GE HealthCare has a goal to achieve net zero by 2050. An interim goal is to reduce our operational emissions (Scope 1 and 2) by 42%\* and our Scope 3 emissions from purchased goods and services, upstream transportation and distribution, business travel, and use of sold products by 25%\*\* by 2030 compared to a 2022 baseline. In 2024, we received validation on our updated goals from the Science Based Targets initiative (SBTi), a group of visionary corporate leaders taking ambitious climate action. As a result of these efforts, we want to enable a more sustainable health system by addressing not only the environmental impacts of our products but also the challenges healthcare professionals and their patients face with resilient, digital solutions.



**We have a goal to achieve net zero emissions by 2050.**

**We've set interim goals to reduce Scope 1 and 2 emissions by 42% and Scope 3 emissions by 25%\* by 2030\*\*.**

\* from a 2022 baseline year.

\*\* includes purchased goods and services, upstream transportation and distribution, business travel, and use of sold products from a 2022 baseline year.

# Leading a new era in sustainability for a more resilient tomorrow

We're creating a world where healthcare has no limits, helping to improve access to care and enable better patient outcomes. Join us as we see the future, and change the outcome.



Accurate  
**Effortless Imaging enabled  
by leading AI and digital  
solutions**

Accessible  
**Sustainable and equitable  
access to MR for any patient  
and any user**

Actionable  
**Groundbreaking discoveries  
and partnerships that elevate  
population outcomes**

# SIGNA™ MR Vision

## Effortless Imaging enabled by leading AI and digital solutions

Establish AI-powered MRI as a one-stop virtual laboratory



**Sustainable solutions that make precision medicine available to all**

## Groundbreaking discoveries and partnerships that elevate population outcomes

Enable discovery of cure for the most debilitating illnesses



## Sustainability-focused MRI solutions that enable broader precision medicine to all



### Reduced impact

Lower power consumption, longer product lifecycle

- Long-life, light, and compact magnets.
- Product life extension through hardware and software upgrades.



### Operational security

Optimized operation for continuous care

- Reliable solutions with high uptime, high operational resilience, & prolonged relevance.
- Highly monitored and optimized MRI systems to help you provide the best care for your patients, everywhere.



### Improved access

Greater access with advanced technology and upgrades

- AI and digital-enabled platforms that help you image more patients with greater efficiency.
- MRI systems that are 30% lighter and can require less than 24 m2 of space, lowering install costs.
- Upgrade solutions to help ensure you always have access to the latest MRI technology.

# Victor Lift helps create a more sustainable tomorrow

Our 1.5T MR system, SIGNA™ Victor, and its services help ensure that radiology professionals and the patients they serve have the technology necessary to create a more sustainable and resilient tomorrow.

## Reducing environmental impact

- GE HealthCare's MR magnet is clinically strong for up to 40 years.
- High performance system that operates on >10% less power consumption.\*
- System offers a small footprint and minimum siting.

## Improving care

- Experience higher efficiency and diagnostic confidence with lower operating costs.
- Decrease power consumption and scan time by up to 50% with AIR™ Recon DL.
- Victor Lift upgrades legacy systems to access the latest platform and productivity features without replacing the magnet.\*\*

\* Compared to previous generation MR system.

\*\* eligible 60cm systems



# Reduced impact

## >1.3M litres of helium saved

- Up to 70% less helium.<sup>1</sup>
- 30% lighter resulting in reduced CO2 emission and siting costs.<sup>2</sup>
- Nearly all components of magnets returned are recycled or reused.
- GE HealthCare's magnets are clinically strong for up to 40 years.<sup>3</sup>
- When paired with our state-of-the-art AI technology, they consume up to 40% less power per patient.<sup>4</sup>

<sup>1</sup> Current commercial IPM/ARES magnets compared to previous generation magnets.

<sup>2</sup> Based on standard operating procedures and controlled conditions.

<sup>3</sup> Up to 40 years for 1.5T systems. Up to 30 years for 3.0T systems.

<sup>4</sup> Projected power consumption reduction on a system with or without deep learning reconstruction.

## Balanced & intelligent magnet technology

### Balanced design

Striking the balance between helium & power savings

### Helium savings for all

Available across 1.5T & 3.0T portfolio

### Secure investment

Industry leader in magnet longevity and upgradability<sup>2</sup>





## Access all the benefits of a new system while retaining your magnet

The Victor Lift program enables your legacy MR system to be upgraded into a brand new platform while maintaining your current magnet. This allows access to the same efficiency, patient and user benefits as a new system but at a more accessible price point and less impact to the environment.

**Protect the environment by maximizing your asset's life**

The magnet is the most valuable asset of an MR system.

---

GE HealthCare's MR magnets are clinically strong for up to 40 years.

---

Avoiding replacement and extending the utilization of your most valuable asset provides several environmental benefits:

- Save 1,000 litres of helium by avoiding the manufacture of a new magnet.\*
- Save 48 tons of CO2 emission by avoiding shipment of a new magnet.\*\*
- 30% reduction in power consumption per patient.\*\*\*



\*Estimation based on difference of helium needed vs a new installation.

\*\*Carbon footprint is the reduction of carbon emission that would have happened if the client exchanged system instead of upgrading it. The CO2 emissions related to transportation is estimated using SimaPro based on the weight of the items not replaced, the mode of the shipment, and the distance of the shipment.

\*\*\*Projected power consumption reduction on a system with and without deep learning reconstruction, comparing same type and number of acquisition.

# Contributing to a healthier planet

More than half of the healthcare sector's climate footprint, approximately 53%, is attributable to energy use.<sup>5</sup> As a result, we have strengthened our commitment to environmentally conscious design and we are implementing more sustainable practices across our product manufacturing, sourcing, distribution, installation, and service operations. This includes improving energy efficiency, optimizing the use of limited or rare materials, providing digitally enabled service throughout the product lifespan, and offering refurbishment and recycling options at the end of product life.

GE HealthCare environmental management system is ISO 14001 certified

Our production and service operations align to ISO 14001 standards.

We're committed to environmental product design

This product conforms with IEC60601-1-9:2007.

<sup>5</sup> Health care climate footprint report | Health Care Without Harm (noharm-uscanada.org), based on 2019 report

## Materials

GE HealthCare reviews the environmental aspects of the material supply used within our products to increase recyclability and decrease the use of hazardous substances, when possible.

### Recyclability

We're committed to high recyclability of our products and reuse when possible.

Nearly all components of magnets returned are recycled or reused.<sup>6</sup>

### Reduce the use of hazardous substances

REACH (EC) 1907–2006

<sup>6</sup>Data on file.



## Packaging

GE HealthCare's imaging equipment has a robust and multi-sourced supply chain for systems and spare parts across our product portfolios.

### Improved packaging

We are replacing our wood and corrugated cardboard packaging with paper, increasing the amount of recyclable packaging.

## Manufacturing

Through our environmental reviews, we also focus on implementing more renewable energy and reducing waste, when possible.

### Reducing electricity

The system uses Ultra High Efficiency (UHE) technology to generate exceptional imaging performance using about half the amount of electrical current than that of comparable legacy systems.



## Product utilization

Our imaging products are designed to help enable energy efficiency through dedicated features and advanced applications to reduce the environmental impact. Ergonomic design can help to enhance health and potentially reduce environmental impacts, such as reducing waste and saving energy.

### Ergonomically designed patient setup and positioning

Flared bore entrance provides additional headroom for patients for lower extremity and body examinations.

---

AIR™ Recon DL enables shorter scan times, reducing the time spent on the table.

---

AIR™ Coils are designed to be flexible and 50% lighter to provide better coverage than traditional coils. They allow greater patient positioning freedom and patient comfort, as well as reduced burden on the technologists lifting the coils.<sup>7</sup>

---

AIR Touch™ offers less patient setup time and less table time for the patient.<sup>8</sup>

---

AIR x™ automated MR slice prescription reduces setup time and provides reproducible planning to ensure exam consistency.

---

### Reduce staff burden

Low table height enables easy loading and unloading of patients on to the MR scanner.

---

AI enabled workflow features such as AIR Touch™ and AIR x™ enable radiographers to do faster and more optimal patient setup.

---

AIR™ Coils enable radiographers to setup patients in more natural positions. This lessens stress for both patient and radiographer.

<sup>7</sup> AIR™ Coils data on file (2018).

<sup>8</sup> Compared to conventional technology. Data on file.

# End of product life

We are increasingly putting our retired products' materials back into the supply chain to maximize efficient use and minimize unnecessary waste. This circularity model enables our imaging products to extend their clinical impact through longer lifespans while reducing the environmental footprint. Additionally, we offer our customers support for upgrades and services throughout a product's lifespan, when available, to maintain optimal performance and help drive better patient outcomes.

Our refurbishment programs involve an extensive inspection and testing process, designed to bring equipment back to its original certified manufacturing specifications. If the system is not suitable for refurbishment, eligible parts are harvested for reuse after quality and performance testing, while the remaining parts are returned to dedicated recycling facilities.

## Product utilization

### Reduce noise

Silenz is a 3D Zero-TE sequence comprising of high-bandwidth excitation and reduced gradient-switching radial acquisition that drastically reduce noise level from an ear splitting, motorcycle-level 91 dB to within 3 dB of scan room ambient sound. In addition, Silenz has added flexibility in sequence prescription to enable faster scan times.

---

### Guidance for product utilization

Instructions are provided for use of the equipment to minimize the environmental impact during installation, use, and operation.

---

### Reduce energy consumption during use

Utilize standby power mode to reduce energy consumption when the system is idle.<sup>9</sup>

---

AIR Touch™ offers less patient setup time and less table time for the patient.

---

AIR™ Recon DL reduces scan time by up to 50% and energy consumed per patient by over 40%.<sup>10</sup>

---

### Power consumption

System off: 6.44 kW  
Standby: 7.90 kW  
System ready to measure: 8.39 kW  
Scan: 12.36 kW

<sup>9</sup> Compared to conventional technology. Data on file.

<sup>10</sup> Per COCIR Self-regulatory initiative for medical imaging equipment, over a 24-hour period, with 12 hours of active day and 12 hours of inactive night scenario.



## Product utilization

### Reduce consumable energy utilization

System requires up to 70% less helium throughout the lifetime of the system.<sup>11</sup>

---

Zero boil-off virtually eliminates helium refills under normal operating conditions.

---

Higher productivity and efficiency performance specifications with >10% less energy consumption compared to previous generation systems.\*

---

### Guidance for end of lifecycle

Equipment instructions are provided to minimize the environmental impact for disposal or recycling.

---

### Upgradeable hardware and software options are provided as a solution to extend the product lifespan

System is wide bore—ready for future upgrade capability.

---

Victor Lift enables legacy systems to be upgraded to a SIGNA™ Victor platform without replacing the original magnet.

---

The life expectancy of GE HealthCare's 1.5T magnet is up to 40 years.

<sup>11</sup> Compared to previous generation MR system.

\* Compared to previous generation platforms



## Product utilization

**Parts harvesting and refurbishment options are provided to reduce waste and environmental impacts while extending imaging access to less advantaged regions**

MR system parts are eligible for assessment through the refurbishment program, in which they are assessed for refurbishment, harvesting, or recycling at the appropriate time in the lifespan.

---

Spare parts are 6.4% repairable and 8.9% harvestable.<sup>12</sup>

---

Reuse, refurbishment, and recycling extends the useful life of each product and/or its components

---

**Waste reduction**

This system is in accordance with Waste Electrical and Electronic Equipment (WEEE) regulations.

<sup>12</sup> Data on file.

# Digitizing healthcare through transformative innovations for a more resilient tomorrow

We are committed to investing in digital capabilities that help accelerate clinical decision making, optimize imaging operations, and drive efficiencies in exam workflows, all of which can improve patient outcomes. Enabling digital transformation will further enhance our predictive and maintenance service operations for the life of your products.

We are also dedicated to driving a more resilient and sustainable future in healthcare. Many factors, including the pandemic, climate-related weather disasters, and supply-chain issues amplified this need. Managing operations through these challenges requires resilience and perseverance.

**≥28 million patients scanned with AIR Recon DL\***  
**>3,600 global installations\*\***  
**≥35 published journal articles**

\*calculated by IB data with estimation 20 scans per day, 5.5 working days in a week, fully start using AIR™ Recon DL 4 weeks after delivery, as of June 10, 2024.

\*\*As of June 10, 2024

## Helping clinicians advance patient outcomes

Advanced applications and cutting-edge AI tools provide personalized data to drive actionable insights, helping healthcare professionals make fast, accurate clinical decisions for care pathways.

**Gain actionable clinical insights quicker for earlier diagnosis**

Scan up to 50% faster and reduce backlogs with AIR™ Recon DL.

Increase SNR and reduce scan time in a single exam.

Diagnose with confidence with end-to-end clinical solutions like One-Stop Prostate imaging with AIR™ Coils and AIR™ Recon DL.

**Keep your imaging equipment up to date with advanced clinical applications**

Smart Subscription protects equipment from obsolescence and keeps the system at its best. It improves patient outcomes and productivity due to improved functionality and easy access to innovation.

**Help improve patient outcomes with improved image quality**

80% of cases see improved SNR without added scan time with AIR™ Recon DL.<sup>13</sup>

AIR™ Recon DL improves image quality up to 1.6 times, allowing consistent and enhanced diagnostic confidence.\*

**Drive advancements with precision health**

Wing-to-wing clinical solutions from setup to report help reduce scan times and increase precision health, including anatomy-dedicated post-processing tools and quantitative tools for measuring and assisting diagnosis.

<sup>13</sup> Results may vary.

\* Reference [https://www.gehealthcare.com/-/jssmedia/gehc/us/files/products/molecular-resonance-imaging/air/mr\\_gbl\\_air-recon-dl\\_091720\\_jb00297xx.pdf?rev=1](https://www.gehealthcare.com/-/jssmedia/gehc/us/files/products/molecular-resonance-imaging/air/mr_gbl_air-recon-dl_091720_jb00297xx.pdf?rev=1)



## Optimizing imaging operations

Our AI-based and advanced digital solutions are designed to increase efficiencies across the radiology spectrum without increasing the administrative and training burden on radiologists and technologists.

### Increase productivity and consistency

Reduce scan time up to 50% with AIR™ Recon DL.<sup>14</sup>

---

AIR x™ automated MR slice prescription reduces setup time and provides reproducible planning to ensure exam consistency.

---

AIR Touch™ automatic coil selection provides faster patient setup and less table time for the patient.

---

Gain data intelligence and actionable insights across the radiology department to increase productivity with Imaging Insights.

---

Leverage on-demand or scheduled virtual clinical applications training with GE HealthCare specialists to support staff, enabled by Digital Expert Access.

<sup>14</sup> Results may vary.



## Optimizing imaging operations

### Reduce downtime

The OnWatch™ remote monitoring system reduces unplanned down time by 35% with an 11% reduction in on-site repair time.<sup>15</sup>

---

Additionally, it boasts a 43% remote fix rate with 83% of issues resolved during the first call.<sup>15</sup>

---

This, in turn, helps reduce travel and carbon footprint, as well as overall energy and waste, by keeping our systems optimally running.

---

Improved thermal performance allows the magnet to stay cold longer during extended outages, and the system can immediately return to scanning when the power goes back on.

---

### Cybersecurity

Our Data Privacy Principles are built on customer feedback, regulatory requirements, and international standards, ensuring that we meet, or exceed, expectations. With our global presence, we navigate a complex landscape of privacy and security regulations and frameworks. The Design Engineering Privacy & Security (DEPS) Procedure is our blueprint for integrating robust privacy and security measures into our products and services, providing peace of mind to healthcare providers and patients worldwide.

<sup>15</sup> Data on file. Results may not be typical for all customers, and these results cannot be guaranteed.



## Enabling intelligent exam workflows

Intelligent automation features help to drive consistency, enable fast, easy exams, and improve workflow with fewer resources.

### Reduce setup time

AIR Touch™ automatic coil selection reduces setup time.<sup>16</sup>

---

AIR x™ allows five times faster setup with four times fewer mouse clicks.<sup>17</sup>

---

### Reduce exam time

AI enabled workflow features such as AIR x™ and AIR™ Touch reduce patient setup time.<sup>17</sup>

---

Reduce scan time up to 50% per patient with AIR™ Recon DL, enabling improved workflow and efficiency.<sup>18</sup>

---

### Ease of use

MR 30 imaging platform provides a comprehensive suite of sequences and applications that cater to a wide variety of anatomies and examinations.

---

AIR™ Coils enable natural and faster patient setup for a wide variety of routine and complex examinations. The high number of elements on AIR™ Coils support acceleration of image acquisition and provide consistent image quality reducing the need to re-scan.

---

### Cleanability

Our equipment is designed to be cleaned and disinfected easily. We continue to test and approve new cleaning and disinfecting agents. Visit [Cleaning.GEHealthCare.com](https://www.gehealthcare.com/cleaning) for updates.

<sup>16</sup> Comparison of automated workflow with AIR x™ versus traditional setup process. Data on file.

<sup>17</sup> Compared to previous generation software. Data on file.

<sup>18</sup> Compared to conventional technology. Data on file.



# Creating a healthy world to help enable better patient outcomes.

[GEHealthCare.com/about/sustainability](https://GEHealthCare.com/about/sustainability)

Not all products or features are available in all geographies. Check with your local GE HealthCare representative for availability in your country. Commercial availability of GE HealthCare medical systems is subject to meeting local requirements in a given country or region. Not all features are included in the standard system configuration. Contact a GE HealthCare representative for more information. Intended for healthcare professionals only.

© 2024 GE HealthCare. SIGNA, AIR, AIR Touch, AIR x, and OnWatch are trademarks of GE HealthCare.  
GE is a trademark of General Electric Company used under trademark license. JB30712XX January 2025



GE HealthCare