

# Focusing on sustainability in MR solutions

**SIGNA™** Artist Evo



# 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.



## **Environmental**

Using fewer resources for a healthier planet.

## **Digital**

Transforming healthcare through innovation.

## **Resilience**

Building flexibility and dependability across healthcare systems.

# MR Vision

## Effortless Imaging enabled by leading AI and digital solutions

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



## Sustainable and equitable access to MR for any patient and any user

## Groundbreaking discoveries and partnerships that elevate population outcomes

Enable discovery of cure for the most debilitating illnesses



## Sustainable 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.



### Equitable 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 m<sup>2</sup> of space, lowering install costs.
- Upgrade solutions to help ensure you always have access to the latest MRI technology.

# Helping to create a more sustainable tomorrow

Our 1.5T MR system, SIGNA™ Artist Evo and its services help ensure radiology professionals and the patients they serve have the technology necessary to create a more sustainable and resilient tomorrow. SIGNA™ Artist Evo transformation extends the legacy system's life expectancy and reduces its carbon footprint.

## Reducing environmental impact

- Transform your legacy MR system by upgrading from 60 cm to 70 cm, with no magnet waste.
- System upgrade uses the existing magnet, eliminating the need for additional helium (~2000L) and its transportation to the site.<sup>1</sup>

## Improving care

- The AIR™ family of products delivers clinical versatility and comfort, intelligent productivity improvements, and consistent extraordinary image quality.
- Deliver faster scans with a boosted gradient performance of 44 mT/m, 170 T/m/s.

<sup>1</sup> Compared to previous generation MR system.



# Contributing to a healthier planet

More than half of the healthcare sector's climate footprint, approximately 53%, is attributable to energy use.<sup>2</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 incorporate environmental considerations at the design phase of our products and promote and enable the reuse of equipment and parts from de-installed equipment.

<sup>2</sup> Health care climate footprint report | Health Care Without Harm (noharm-uscanada.org), based on the 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.

Returned MR magnets are reused, refurbished, or recycled.<sup>3</sup>

### Reduce the use of hazardous substances

REACH (EC) 1907–2006

<sup>3</sup> Data on file.

# Reduced impact

## >1.3M liters of helium saved<sup>4</sup>

- Up to 2000 liters of helium avoided per upgraded system
- No construction resulting in lower siting costs
- Existing magnet is reused, thus minimizing waste.
- GE HealthCare MR systems are eligible for refurbishment, reuse, or recycling at the end of their product life.

<sup>4</sup> Estimate of He avoided from all executed Lift & Evo upgrades not requiring magnet manufacturing.

## Balanced & intelligent magnet technology

### Balanced design

Striking the balance between helium & power savings

### Helium savings for all

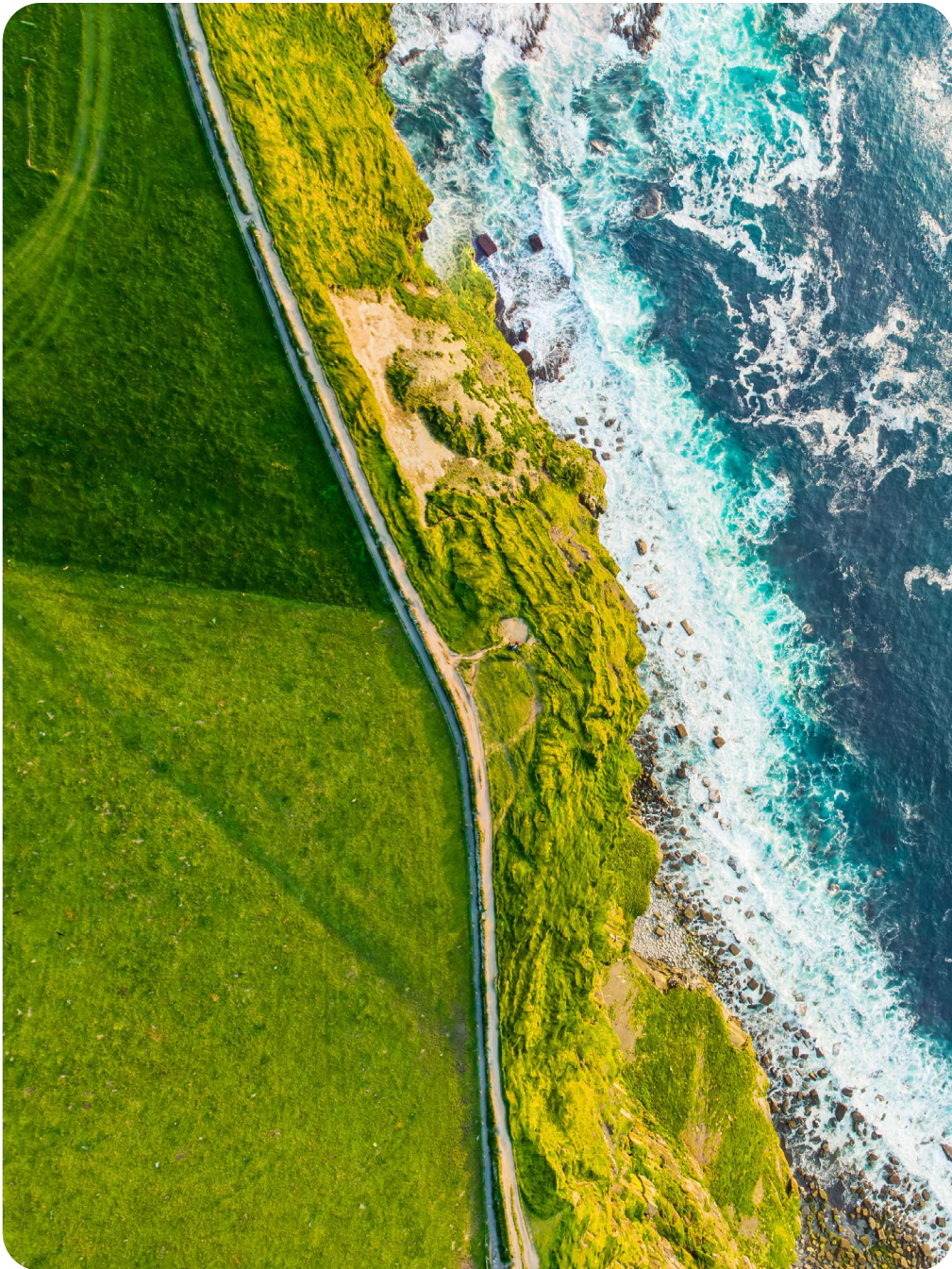
Available across 1.5T & 3.0T portfolio

### Secure investment

Industry leader in magnet longevity and upgradability<sup>5</sup>



<sup>5</sup> Based on standard operating procedures and controlled conditions.



## Packaging

GE HealthCare 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.

## 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

#### Reduce staff burden

Transforming from a 60 cm to a 70 cm bore widens the cross-section by 36%, giving patients extra room during their scan.

Reduce claustrophobia rejection rates by 90% while boosting comfort and patient satisfaction.<sup>6</sup>

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

AIR™ Coils are designed to be flexible and 50% lighter per coil element 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 59% less patient setup time and 37% 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.

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#### Reduce staff burden

Increase productivity and streamline workflows with shorter scan times.

Optional detachable eXpress Patient Table improves patient handling and comfort, allowing for faster patient setup.

<sup>6</sup> Claustrophobia rate comparison head-first/feet-first.

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

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



## Product utilization

### Reduce noise

Silenz is a 3D Zero-TE sequence comprised 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 by 53% when the system is idle.<sup>9</sup>

AIR Touch™ offers 59% less patient setup time and 37% less table time for the patient.<sup>10</sup>

### Power consumption

Off mode: 6.0 kW·h  
Standby (no scan): 8.84 kW·h  
Ready-to-scan: 16.9 kW·h  
Scan mode: 36.9 kW·h

### Reduce consumable energy utilization

System upgrade uses the existing magnet, eliminating the need for additional helium (~2000L)<sup>11</sup> and its transportation to the site.

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

<sup>9</sup> Compared to energy consumption when the system is in scan mode.

<sup>10</sup> Compared to conventional technology. Data on file.

<sup>11</sup> Estimate of He avoided from Lift & Evo upgrades from not requiring new magnet manufacturing.

# 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

**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.**

SIGNA™ Artist Evo is GE HealthCare's first 1.5T upgrade that widens the bore on legacy MR systems to 70 cm, eliminating the need to replace the system.

The life expectancy of a GE HealthCare 1.5T magnet is up to 40 years.

**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 at the appropriate time in the lifespan, for refurbishment, harvesting, or recycling.<sup>12</sup>

**Waste reduction**

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

<sup>12</sup> System parts are eligible for refurbishment, although whether a system is actually refurbished versus harvested for parts or otherwise recycled or reused, is dependent on the state of the system when GE HealthCare takes possession of it.



## Immediate impact on sustainability

SIGNA Artist Evo 1.5T MR is designed to minimize carbon footprint by offering an extension of the lifecycle and avoid related parts entering the waste stream.

<b>Less resources<sup>13</sup></b>	Avoids need for helium fill and loss during transportation. ~1 Ton of CO2 emission avoided vs a new installation
<b>Efficient processing<sup>14</sup></b>	Avoids need to manufacture the magnet as it is not replaced. ~14 tons of CO2 emission avoided
<b>Less manufacturing<sup>15</sup></b>	Avoids need to manufacture the magnet as it is not replaced. ~64 tons of CO <sub>2</sub> emission avoided
<b>Reducing transportation<sup>16</sup></b>	Avoids the need to ship heavy magnet if the system is exchanged instead of upgrading. ~14.5 tons of CO2 emission avoided
<b>Efficient use<sup>17</sup></b>	AI algorithms that lower scan time without sacrificing image quality. ~30% reduction in power consumption per patient on a system with and without deep learning reconstruction
<b>Reducing disposal</b>	Refurbish / remanufacture or reclaim for parts and materials. ~84% of the materials used can be returned to the flow of recyclable materials. <sup>18</sup>

<sup>13</sup> Estimation based on difference of Helium needed vs a new installation and the carbon footprint of liquid helium supplied by a gas company 712 g CO<sub>2</sub>/l He, the on-site shipment. <https://pubs.aip.org/aip/ltp/article/49/8/967/2905263/Carbon-footprint-of-helium-recovery-systems>

<sup>14</sup> Based on internal estimates. The process carbon footprint are based on screening Life cycle assessment (sLCA) estimated with SimaPro. The CO<sub>2</sub> emission is estimated energy consumption and mix of energy source in manufacturing, and assumptions related to recyclability of raw materials.

<sup>15</sup> Based on internal estimates. The magnet/system carbon footprint are based on screening life cycle assessment (sLCA) estimated with SimaPro. The CO<sub>2</sub> emission is estimated using the weight and the material type of the system components, and assumptions related to recyclability of raw materials.

<sup>16</sup> The transportation CO<sub>2</sub> emission is estimated with the weight of the items not replaced, the mode of the shipment, and the distance of the shipment using SimaPro. SimaPro, estimates sustainability KPIs.

<sup>17</sup> Projected power consumption reduction on a system with or without deep learning reconstruction.

<sup>18</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.

**≥50 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 day in a week, fully start using AIR™ Recon DL 4 weeks after delivery, as of 11 April 2025.

\*\*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 for quicker decision making

Scan up to 50% faster and reduce backlogs with AIR™ Recon DL.<sup>19</sup>

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.

Using a deep-learning-based reconstruction algorithm, AIR™ Recon DL improves SNR by making use of the raw data to remove image noise and ringing.

### Help improve patient outcomes with improved image quality

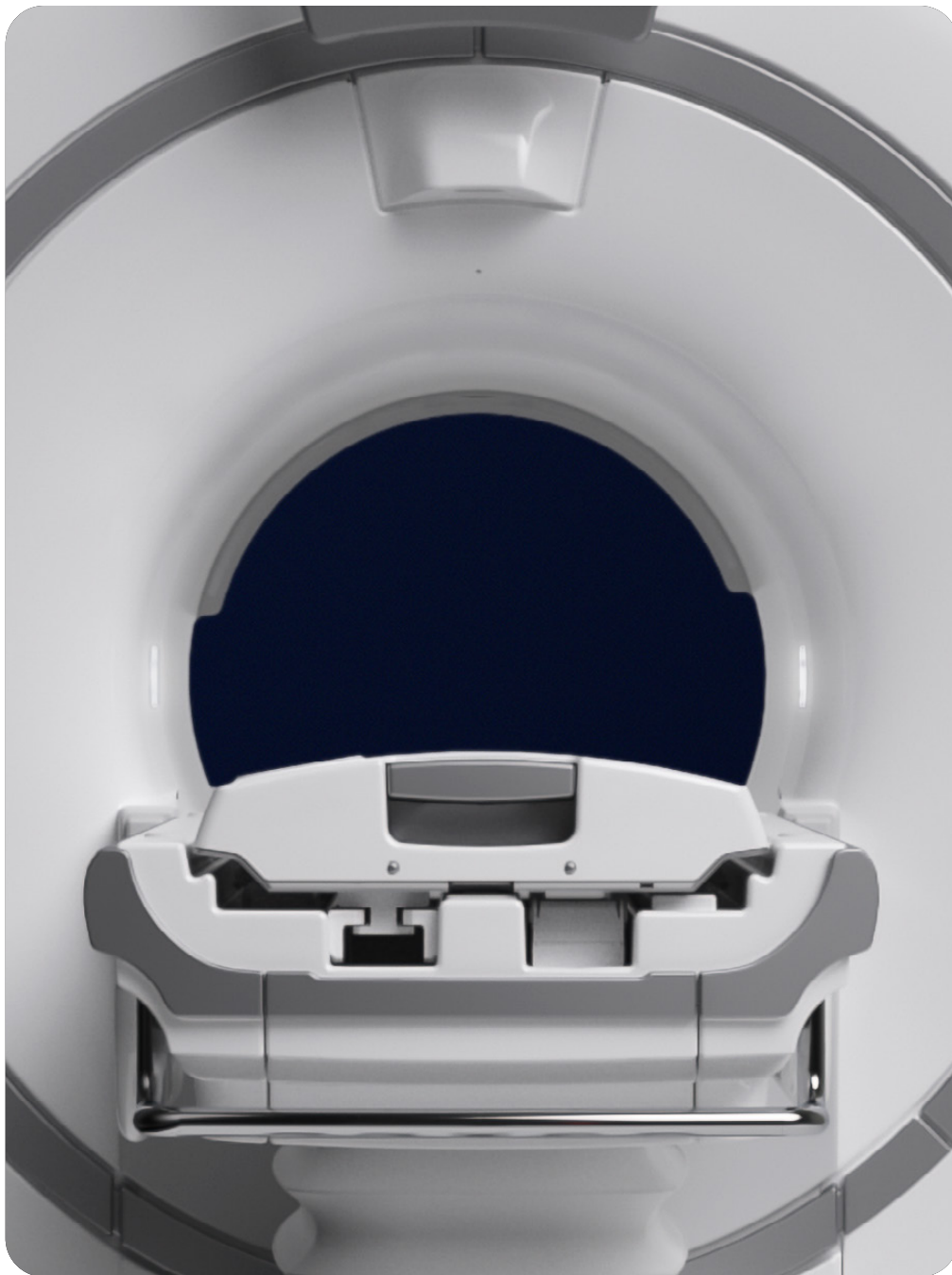
80% of cases see improved SNR without added scan time with AIR™ Recon DL.<sup>20</sup>

### 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>19</sup> Compared to conventional technology. Data on file.

<sup>20</sup> Results may vary.



## 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>21</sup>

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

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GE HealthCare's Imaging Protocol Manager remotely updates and manages protocols between facilities on MR systems to help deliver consistent image quality and optimal patient care.

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

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MR Performance Excellence can help increase capacity by optimizing equipment usage.

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

<sup>21</sup> Compared to conventional technology. Data on file.



## Optimizing imaging operations

### Reduce downtime

The OnWatch™ remote monitoring system reduces unplanned down time by 35% over 10% reduction in on-site repair time.<sup>21</sup>

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Additionally, it boasts a ~40% remote fix rate with ~80% of issues resolved during the first call.<sup>22</sup>

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

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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.

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### 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>22</sup> Data on file. Results may not be typical for all customers, and these results cannot be guaranteed. OnWatch supporting data used in EPD like document: REF-07057.



## 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™ reduces set-up time by 59%.<sup>23</sup>

AIR x™ allows five times faster setup with four times fewer mouse clicks.<sup>24</sup>

### Reduce exam time

AIR Touch™ reduces patient table time by 37%.<sup>23</sup>

Reduce scan time up to 50% per patient with AIR™ Recon DL, enabling improved workflow and efficiency.<sup>25</sup>

Reduce overall scan times without compromising image quality with HyperSense, which can be used in 88% of all clinical procedures.

### Ease of use

AIR™ Coils optimize SNR, enabling positioning for any patient shape, while anatomy-dedicated post-processing tools unique to the specific organ system bring precision medicine into the MR suite.

Accelerate emergency egress with the eXpress Patient Table, which can be undocked and removed by one user in under 30 seconds, typically.

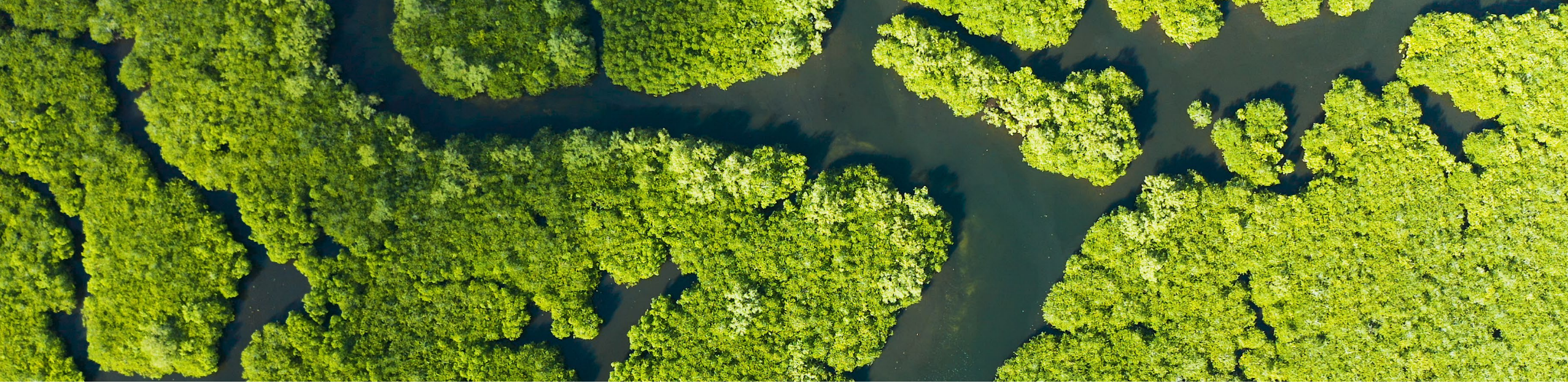
### Cleanability

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>23</sup> Compared to previous generation software. Data on file.

<sup>24</sup> Comparison of automated workflow with AIR x™ versus traditional setup process. Data on file.

<sup>25</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.*

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