

# Focusing on sustainability in ultrasound



Vscan Air™ Handheld Ultrasound Systems

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

For patients, it is essential that we continue to drive progress toward early, precise, and accessible diagnosis and treatment of more people. For the planet, it is critical that we do so with a reduced negative impact on precious and rare resources that are imperative to life. We believe that the advancement of precision health, 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 is committed to achieving net zero by 2050 and we have signed up to the Science Based Targets initiative (SBTi) business ambition for 1.5C, a group of visionary corporate leaders taking ambitious climate action, and we have committed to implementing science based targets. This includes a public goal to reduce operational emissions (scope 1 and 2) by 50% by 2030 against a 2019 baseline. 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 are committed to achieving net zero emissions by 2050.**

**We've set a public goal to reduce operational emissions (scope 1 and 2) by 50% by 2030.**

# 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.



## **Environmental**

Using fewer resources for a healthier planet.

## **Digital**

Transforming healthcare through innovation.

## **Resilience**

Building flexibility and dependability across healthcare systems.

# Vscan Air helps create a more sustainable tomorrow

Our Vscan Air handheld ultrasound family and its services help ensure clinicians and the patients they serve have the technology necessary to create a more sustainable and resilient tomorrow.

## Reducing environmental impact

- The Vscan Air systems are designed to be refurbished, reused, or recycled at the end of its product life to minimize unnecessary waste.

## Improving care

- The small footprint of Vscan Air facilitates scanning anytime, anywhere\* to improve access to ultrasound.
- SignalMax™ leverages the power of high-end ultrasound in miniaturized hardware to deliver high-quality images in an ultraportable device.
- Setting a new standard in handheld ultrasound by miniaturizing the power of XDclear™ to deliver extraordinary image quality with our sector-phased array transducer.

\*The device has been verified for limited use outside of professional healthcare facilities. Use is restricted to environmental properties described in the user manual.



# Contributing to a healthier planet

More than half of the healthcare sector's climate footprint, approximately 53%, is attributable to energy use.<sup>1</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>1</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.

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### Reduce the use of hazardous substances

EU RoHS directive 2011/65/EU

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REACH (EC) 1907-2006



## Packaging

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

## Manufacturing

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

### Renewable energy

Vscan Air probes are made in our Zipf, Austria, facility. This site uses 100% green electricity, which is environmentally friendly and renewable.

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### Reducing electricity

Site uses photovoltaic unit: 312,84 kWp unit, annual production ~ 312,000 k-Wh

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1/3 of energy demand met by solar energy.

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Greenhouse gas reduced by approximately 130 tons per year.

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Site implemented heat pump heating, which reduces heating gas by approximately 50% annually.



## Product utilization

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

### Human factors design excellence

#### Patient setup and positioning

Vscan Air helps to bring ultrasound scans to patients in hard-to-reach areas due to its lightweight portability and wireless capability. It pairs seamlessly with both Android and iOS display devices for easy viewing at the point of care and enables users to start scanning faster with smart connect pairing.

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#### Reduce staff burden

Vscan Air seamlessly integrates into your daily practice with its human factors centered design for easy ergonomic handling and one-swipe/tap controls with a simple and intuitive interface. Vscan Air allows clinicians to immediately visualize anatomy to help reduce their differentiated diagnosis and efficiently evaluate a patient before deciding on next steps. Vscan Air brings ultrasound to the point of care and therefore helps to triage certain trauma patients directly to the operating room.

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#### Reduce noise

Ultrasound does not emit noise.



## Product utilization

### Guidance for product utilization

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

### Reduce energy consumption during use

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There are zero carbon emissions at place of use.

### Power consumption

Off Mode: No power consumption in off mode.  
Standby (no scan): Goes into standby after five minutes of inactivity.  
Scan Mode: Total scan time of 50 minutes with fully charged battery (with 80% black and white, 20% color imaging)

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### Carbon emissions

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There are zero direct carbon emissions at place of use.

### Guidance for end of lifecycle

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



# 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

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

Updates for Vscan Air software application are available via Google Play™ and Apple® App Store.

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

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

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**Waste reduction**

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

# 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.

## 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

Insights right in your pocket.

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Accelerate diagnosis and treatment decisions with wireless whole-body scanning for when you need rapid answers at the point of care.

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

Vscan Air supports over-the-air software updates via its mobile app, enabling the use of new clinical applications with existing hardware.

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### Enhancing image quality

Our proprietary SignalMax™ + XDclear™ technology, a high-intensity signal processing ecosystem, enables high-quality ultrasound images in the ultraportable Vscan Air.

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### Drive advancements with precision health

Vscan Air + Digital Tools help to improve the clinical workflow with secure collaboration, image, and device management solutions.



## Optimizing anytime ultrasound

Our AI and digital solutions are designed to help increase efficiencies for point of care users across many specialities.

### Increase productivity and consistency

Vscan Air offers a dual probe so you can complete deep and shallow scans with one handheld device without compromising on image quality. In addition, Vscan Air SL with Caption AI™ provides real-time guidance that shows step-by-step how to maneuver the probe to capture diagnostic-quality standard echocardiographic views to support rapid cardiac assessments.

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### Reduce downtime

Vscan Air is waterproof, military standard drop-tested, flight-ready, and ambulance capable. Its robustness can reduce downtime significantly. Seamlessly monitor electronics and transducer elements to ensure the device is fully operational even after a drop.

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### Cybersecurity

GE HealthCare's Design Engineering Privacy and Security (DEPS) process follows GDPR, HIPAA, NIST 800-53, NIST 800-30, ISO 27001, and NIST CSF requirements.



## Enabling intelligent exam workflows

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

### Reduce setup time

Handheld device is pocket-sized and has minimal setup time.

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### Reduce exam time

Vscan Air handheld ultrasound allows scanning right at the point of care to help triage patients with no need to relocate the patient to conduct a scan. With certain cardiac views, Vscan Air SL with Caption AI automatically calculates the left ventricular ejection fraction (LVEF), once an image is acquired, to assist the evaluation.

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### Ease of use

Vscan Air is designed to be extremely easy to use, with minimal adjustments needed to acquire images. Its human-focused design helps keep things simple with one-swipe/tap controls, simple user interface and intuitive design.

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### 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.



# 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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