



# Sustainable women's health ultrasound solutions for a resilient tomorrow

Voluson™ Expert Series Ultrasound  
Voluson E10, Voluson E8, Voluson E6





# Creating a more sustainable future requires we 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 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. We are committed to achieving net zero by 2050 and are part of the UN-backed “Race to Zero,” with a goal of reducing emissions based on the Paris Agreement. We’ve also set a public goal to achieve a 50% reduction in our own operational emissions by 2030. 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 options.



We are committed to achieving **net zero** emissions by 2050.

We’ve set a public goal of a **50% reduction** in our own operational emissions by 2030.

**We deliver sustainable,  
intelligently efficient  
solutions for a resilient  
tomorrow.**

Building a healthier world to  
help improve access to care and  
enable better patient outcomes.



**Green**

Using fewer resources for a healthier planet.

**Digital**

Transforming healthcare through innovation.

**Resilience**

Building flexibility and dependability across healthcare systems.



## Voluson Expert Series consoles help create a resilient tomorrow.

Voluson E10, E8, and E6 and their services, help ensure that women's health professionals and the patients they serve have the technology necessary to create a sustainable and resilient tomorrow.

### Reducing environmental impact

- Voluson Expert Series ultrasound systems are designed to be refurbished, reused, or recycled at the end of their product life to minimize unnecessary waste.

### Improving outcomes

- AI-based measurement tools reduce exam time and increase measurement accuracy.
- Ergonomic design improves the user experience and reduces strain on clinicians and system operators.
- Radiance System Architecture amplifies performance, generating enhanced contrast resolution and faster processing speeds and frame rates.





# 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 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 and remote predictive and maintenance 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**

The Voluson Expert Series partially conforms with IEC60601-1-9.

## 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.

### Recyclable

Approximately 63% of the Voluson Expert Series consoles consist of recyclable raw materials:

- Voluson E10, E8, and E6
- Steel: 74.05 kg / 58.30%
- Zinc: 3.1 kg / 2.44%
- Aluminum: 2.5 kg / 1.95%
- Copper: 0.72 kg / 0.57%

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

### Reduce the use of hazardous substances

EU RoHS directive 2011/65/EU

REACH (EC) 1907–2006

All Voluson consoles comply with the European RoHS Directive 2011/65/EU including Commission Delegated Directive (EU)2015/863.

All Voluson consoles comply with the REACH Regulation (EC) No 1907/2006.

<sup>1</sup> Health care climate footprint report | Health Care Without Harm (noharm-uscanada.org)



## Packaging and distribution

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

### Improved packaging

Reusable packaging is utilized for all Voluson consoles.

The cardboard used in packaging consists of recycled content and can be recycled as well.

Packaging material for deliveries to the Zipf, Austria, site is collected and reused onsite.

**Product transportation** Air Transport 37.5%  
Truck Transport 62.5%



**62.5% product transportation utilizes low environmental impact modes**

## Manufacturing

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

### Renewable energy

Voluson Expert Series ultrasound systems are made in our Zipf, Austria, facility, which uses 100% environmentally friendly and renewable energy.

### Reducing electricity

The Zipf site has reduced greenhouse gas emissions by 50 tons per year.

Various energy reduction projects are ongoing in our Zipf facility.

The site has reduced heating gas by approximately 50% by using a heat pump to meet needs.

The 2021 energy usage at this facility was as follows:

Electricity: 46.58 kW·h per produced system

Gas: 72.19 kW·h per produced system



## Product utilization

Our imaging products are designed to help enable energy efficiency through dedicated features and advanced applications to reduce the environmental impact.

## Ergonomically designed

### Reduce staff burden

Operators and clinicians can adjust Voluson Expert Series ultrasound consoles for comfort and ease of use. The Voluson ultrasound systems are adjustable:

Rotation: adjustable +/- 38° from center  
Extension: 195 mm (7.9 inches)

---

The monitor can be moved forward and backward, adjusted in height, and inclined.

---

Cable hooks are available for integrated cable management of ultrasound probes.

---

Ultrasound probes have been ergonomically designed to do the following:

- Handle and manipulate with ease.
  - Connect to the system with one hand.
  - Be lightweight and balanced.
  - Have rounded edges and smooth surfaces.
- 

An optional foot switch is used for hands-free, comfortable system control.



## Product utilization (Cont.)

### 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

A screen saver can be set to appear after a definable period of inactivity.

When in Auto Scan Stop, freeze mode is activated after five minutes of inactivity.

After an hour of inactivity, the system automatically activates freeze mode, even when Auto Scan Stop is not enabled.

Standby mode uses less energy than both ready-to-scan mode and scan mode.

### Power consumption

Voluson E10

Off mode: 0 kW·h per hour

Standby mode: 0.009 kW·h per hour

Ready-to-scan mode: 0.196 kW·h per hour

Scan mode: 0.282 kW·h per hour

A maximum of 800 VA is used including all options, with typical console power consumption of approximately 350 VA, excluding peripherals.

There are zero direct carbon emissions at place of use.





## 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 partnered support for upgrades and services throughout a product's lifespan 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 rest are returned to dedicated recycling facilities.

## Product utilization (Cont.)

<b>Guidance</b>	Equipment instructions are provided to minimize the environmental impact for disposal or recycling.
<b>Upgradeable hardware and software options are provided as a solution to extend the product lifespan.</b>	Upgrades are available for Voluson Expert Series systems.
<b>Parts harvesting and refurbishment options are provided to reduce waste and environmental impacts while extending imaging access to less advantaged regions.</b>	<p>94–96% of most systems are reused, refurbished, or recycled, extending the lifetime of each product.<sup>2</sup></p> <p>Voluson Expert Series ultrasound system parts are eligible for refurbishment consideration, in which they are assessed for refurbishment, harvesting, or recycling at the appropriate time in the lifespan.<sup>3</sup></p> <p>100% of Voluson Expert Series consoles are eligible for refurbishment.</p>
<b>Waste reduction</b>	This system is in accordance with Waste Electrical and Electronic Equipment (WEEE) regulations.

<sup>2</sup> Products within ultrasound are eligible for refurbishment, although whether a system is 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. Data on file.

<sup>3</sup> Products within ultrasound 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.



## Digitizing healthcare through transformative innovations for a 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.

### Advancing clinical outcomes

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

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

Voluson Expert Series:

Edison™ AI powers applications, including SonoCNS, which reduces keystrokes by 80% in fetal brain exams and helps properly align and display recommended views 29% faster than previous versions.

On Voluson E10, eSTIC (Spatio-Temporal Image Correlation) enhances fetal cardiac exams with up to 75% reduction in acquisition time over traditional STIC. STIC leads to reduced artifact from fetal movement and improved B and C planes. It reduces acquisition time from 12 seconds to 1.3 seconds.

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

Voluson ultrasound system software updates and upgrades are available.

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

Radiance System Architecture amplifies performance, generating enhanced contrast resolution and faster processing speeds and frame rates. It works in harmony with our unique probe technology, offering advanced imaging capabilities.

#### Drive advancements of precision health

Voluson Expert Series combines AI and automation applications to increase productivity, streamline workflows, minimize rework, and deliver the most personalized patient care possible.



## 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

iCenter™ analytics provides insights for hospital managers to improve operational performance, asset utilization, and asset performance.

---

### Reduce downtime

GE Healthcare's predictive analytics tools reduce downtime, optimize workflow, and reduce service interventions. iCenter analytics tracks metrics and delivers data on equipment status, maintenance history, and performance to help reduce downtime.

---

The remote service platform InSite™ connects you with a GE Online Service Engineer or Applications Support Engineer. It has remote diagnostics capability as well as the ability to request service. Request for service via the InSite link. Product is available in some markets.

---

Software updates may be available for download via media or eDelivery.

---

### 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 drive consistency, enable fast, easy exams, and improve workflow with fewer resources, all while achieving similar or improved outcomes.

### Reduce setup time

Users can easily access patient information from an external Worklist Server.

### Reduce exam time

A suite of applications is designed to improve workflow and can substantially reduce keystrokes and analysis time, leading to increased efficiency and shorter exams.

#### Voluson E10

With e4D SnapShot function, reduce keystrokes more than 80% when moving from real-time 4D to eSTIC or 3D rendering.<sup>4</sup>

### Ease of use

#### Voluson Expert Series

Uterine Trace takes the effort out of 3D. In 3 simple steps, obtain the coronal plane of the uterus. Uterine Trace reduces keystrokes by more than 65%.<sup>5</sup>

Patient scan time reduced by as much as 45% with Scan Assistant 2.0 and ViewPoint™, saving an average of seven minutes per exam.<sup>6</sup>

### 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. This includes validated cleaning and disinfection instructions for probes.

<sup>4</sup> Comparison performed using GE's eM6C probe and GE's RAB6-D probe.

<sup>5</sup> Comparison performed using GE's Voluson E10 EC350 (BT20) and GE's Voluson E10 EC340 (BT19).

<sup>6</sup> Enhanced Efficiency with Customized Ultrasound Exam Protocols and Quality Reporting - OB/GYN specialists of Palm Beach—USA



**Building a healthy world to help enable better patient outcomes.**

GE Healthcare is a member of COCIR, the European Trade Association representing the medical imaging, radiotherapy, health ICT, and electromedical industries.<sup>7</sup>

<sup>7</sup><https://www.cocir.org/about-cocir/members.html>

*Not all products or features are available in all geographies. Check with your local GE Healthcare representative for availability in your country. Not all features are included in the standard system configuration. Check with your local GE Healthcare representative.*

© 2022 General Electric Company. GE, the GE Monogram, Voluson, Edison, iCenter, InSite, and ViewPoint are trademarks of General Electric Company.

JB21947XX