Sustainable cardiovascular ultrasound solutions for a resilient tomorrow

Vivid™ S60N & Vivid S70N Ultra Edition* Ultrasound

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.

Vivid S60N & Vivid S70N help create a resilient tomorrow.

Our Vivid S60N & Vivid S70N cardiovascular ultrasound and their services help ensure that cardiology professionals and the patients they serve have the technology necessary to create a sustainable and resilient tomorrow.

Reducing environmental impact

- Vivid S60N & Vivid S70N systems are designed to be refurbished, reused, or recycled at the end of 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.
- Our cSound™ platform delivers exceptional image quality.

Contributing to a healthier planet

More than half of the healthcare sector's climate footprint, approximately 53%, is attributable to energy use.[1] 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	This product conforms with IEC60601-1-9

[1] Health care climate footprint report | Health Care Without Harm (noharm-uscanada.org)

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	We're committed to high recyclability of our products and reuse when possible.
Reduce the use of hazardous substances	Compliant to EU RoHS directive 2011/65/EU
	REACH (EC) 1907-2006
	Including Commission Delegated Directive 2015/863

Manufacturing

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

Renewable Energy	Vivid S60N & Vivid S70N are manufactured at a facility that uses 100% renewable district heating for part of the facility; the rest is a combination of renewable and non-renewable energy.
	In 2021, the total consumption was divided as follows: 95,450 kWh fully renewable 1,368,532 kWh partly renewable, partly non-renewable, depending on vendor capacity

Packaging

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

Improved packaging	Packaging material is recyclable and FSC certified.

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	Ergonomic “FlexFit” mechanism enables continuous pivoting height adjustment of the control panel.
	Articulating monitor arm (horizontal and vertical) and lightweight transducers combine for an extremely ergonomically friendly cardiovascular ultrasound system.
	Fold down and rotation lock mechanism for transportation. Width: 540 mm (21.4”) Depth: 760 mm (30.2”) Height: 1320 mm–1670 mm (52.0” – 65.7”) Minimum height with folded screen: 1180 cm (46”) Weight: <73 kg (161 lbs.)
	The Vivid S60N & Vivid S70N also have adjustable monitors: 350 mm horizontal bidirectional 150 mm vertical height adjustment Swivel to any viewing direction
	The probes have been ergonomically designed to handle and manipulate with ease, and an optional foot switch can be used for hands-free system control.
Noise Level	Typical acoustic noise: max 42dB, min 29dB

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	The system is designed to auto freeze after time of inactivity determined by the user.
Power consumption	Off Mode: 8W Standby (no scan): 184W Scan Mode: 2D scanning–214W 4D scanning–238W
Reduce consumable energy utilization	Auto Freeze (tissue detection) on 4Vc probe will automatically enable freeze mode when the probe is not in use. Automatically entering freeze from 4D scan reduces energy consumption by 54W (23%).
Carbon Emissions	There are zero direct carbon emissions at place of use.
Natural Resources	Fully RoHS compliant. These more compact ultrasound scanners use fewer electronic boards and components.

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.

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.	Upgrades are available for the Vivid S60N & Vivid S70N.
Parts harvesting and refurbishment options are provided to reduce waste and environmental impacts while extending imaging access to less advantaged regions.	Cardiovascular ultrasound 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.[2] 94–96% of most systems are reused, refurbished, or recycled, extending the lifetime of each product.[2] 100% of Vivid S60N & Vivid S70N consoles are eligible for refurbishment.
Waste reduction	This system is in accordance with Waste Electrical and Electronic Equipment (WEEE) regulations.

[2] 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. Data on file.

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 to drive actionable insights, helping healthcare professionals make fast, accurate clinical decisions for care pathways.

Gain actionable clinical insights	Automated Functional Imaging (AFI) leads to earlier diagnosis and improved outcome.
	The AI Auto Measure 2D tool eliminates up to 80% of clicks.[3]
	AI-based Cardiac Auto 2D Measurement (option) enables semi-automated quantification of the most common distance measurements performed on parasternal long axis 2D images with minimum user guidance.
	Obtain ejection fraction and strain measurements in just one click with results in 15 seconds, on average.[4]
	Cardiac Auto Doppler automatically provides Doppler measurement results for the most common parameters with minimal user guidance.
Keep your imaging equipment up to date with advanced clinical applications	Vivid S60N & Vivid S70N are designed to download software updates when they are available using InSite™. Software download monitors, notifies, delivers, and installs available system software updates. Remote update options via eDelivery are available in some markets.

[3] Applicable to the AI Auto Measure 2D algorithm. Results based on GE internal data (DOC2361011).
[4] Time to strain measurement result may vary with heart rate, frame rate and Vivid system. Verification of performance done by GEHC clinical application specialists using Vivid system (DOC2739637).

Advancing clinical outcomes (Cont.)

Help improve patient outcomes with improved image quality

Our cSound platform uses advanced software image reconstruction and state-of-the-art graphics technology to deliver exceptional image quality on the Vivid S60N & Vivid S70N.

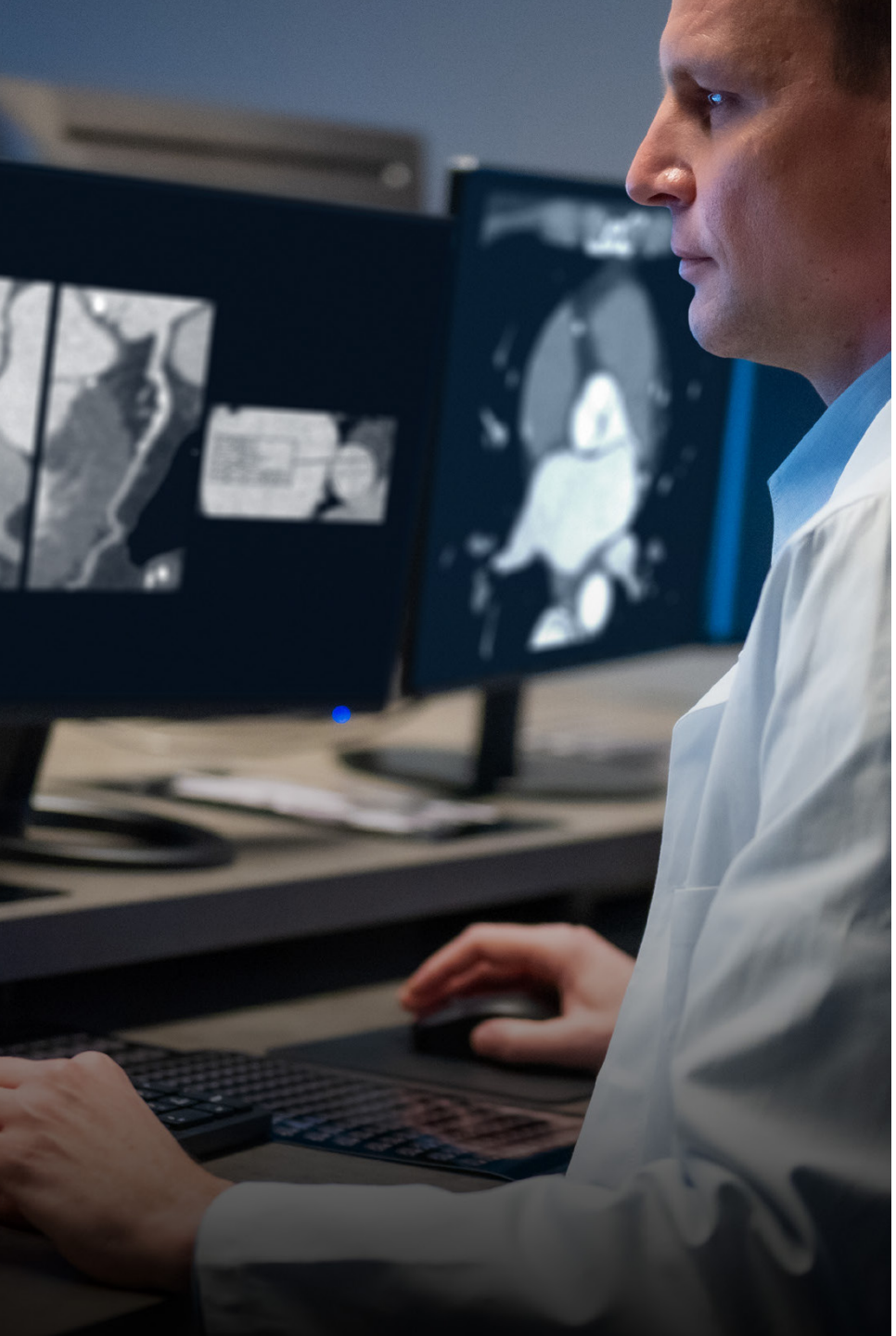
Vivid S60N & Vivid S70N are equipped to automatically, and in real time, optimize tissue imaging with the goal of signal independent uniform gain and contrast distribution.

UD clarity and UD speckle-reduce imaging removes speckle in real time, examining the relative difference between neighboring pixel values and determining whether the grayscale variations have a sharp difference, follow a trend, or are random in nature.

HD imaging helps reduce speckle and noise while enhancing resolution and contrast.

Drive advancements of precision health

AFI has been shown to be more sensitive than traditional parameters like ejection fraction. This means earlier diagnosis and improved outcome.



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	A Raw Data Streaming option sends image information as a digital video stream to clients in real time. The clients can visualize, modify, and process image data from GE scanners through their own applications.
	Digital Expert enables the user to connect remotely to a GE Healthcare Clinical Specialist to receive application-related training and help.
Reduce downtime	The “Contact GE” onscreen button directly generates a real-time service request to a GE online engineering or application specialist via the remote service platform, InSite. It also has remote diagnostics capability.
	Software updates are available for download via eDelivery.
	The battery option features a transportation mode that keeps the system ready to scan within a few seconds of being connected to a power outlet.
Cybersecurity	GE Healthcare’s Design Engineering Privacy and Security (DEPS) process follows GDPR, HIPAA, NIST 800-53, NIST 800-30, 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, all while achieving similar or improved outcomes.

Reduce setup time	Our QuickApps offer both factory and user programmable sub-preset features that keep 2D and geometry settings while adapting color flow or contrast parameters. Vivid S60N & Vivid S70N have pre-programmable M&A and annotation categories.
Reduce exam time	AI-powered applications, such as Auto 2D measure, Auto Doppler measure, and Auto EF, automate common clinical measurements. Customers report that using these tools has reduced their exam times by 7–10 minutes.
Ease of use	In addition to delivering auto optimized superb 2D images, our cSound technology requires little manipulation. Many of our other optional automated tools are also designed for ease of use, including 2D Auto EF 3.0 and AFI 3.0 Productivity Package with AI-based View Recognition, Cardiac Auto Doppler with AI Auto Measure—Spectrum vRecognition, AI Auto Measure—2D, and Scan Assist Pro. Likewise, many of our 4D imaging tools are engineered with ease-of-use in mind. These include Single Beat 4D, 4D Views, Advanced 4D User Toolbox including FlexiSlice, Advanced 4D User Quantification Package, 4D Auto LVQ, 4D Auto MVQ, 4D Auto AVQ, FlexiViews, 4D Markers, and View-X.
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* for updates. This includes validated cleaning and disinfection instructions for probes.

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.[5]

[5] *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.
**Ultra Edition refers to the 2022 release of the Vivid portfolio.*

© 2022 General Electric Company. GE, the GE Monogram, Vivid, cSound, and InSite are trademarks of General Electric Company.

JB21124XX