Focusing on sustainability in ultrasound

LOGIQ Totus™ Ultrasound

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 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.

LOGIQ Totus helps create a more sustainable tomorrow

Our LOGIQ Totus ultrasound 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

- Our General Imaging Ultrasound, LOGIQ Totus and its services help ensure that clinical professionals and the patients they serve have the technology necessary to create a sustainable and resilient tomorrow.

- The LOGIQ Totus system is designed to be refurbished, reused, or recycled at the end of its product life to minimize unnecessary waste.

Improving care

- 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 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: +A1:2013+A2020.

[1] 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.

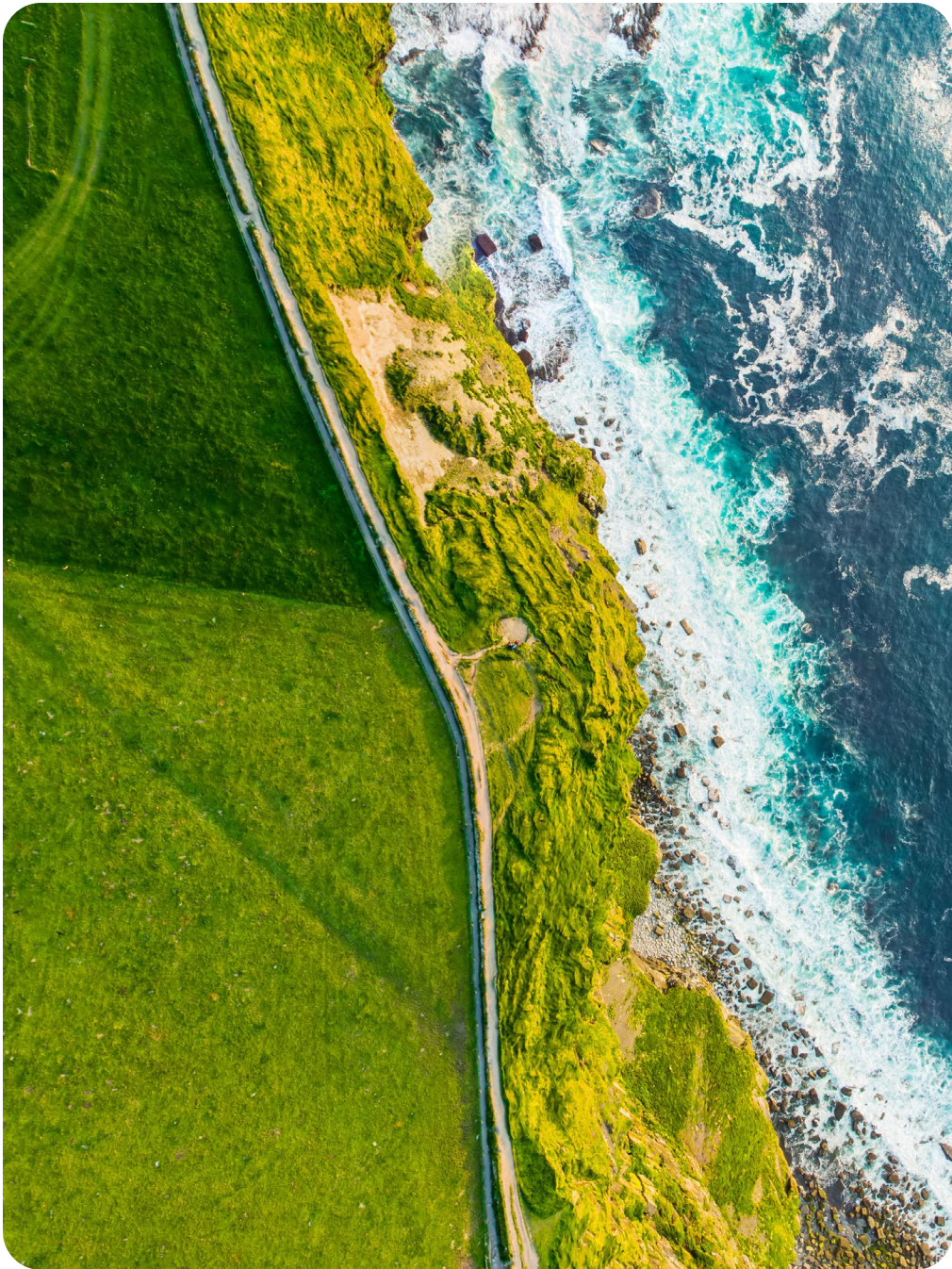|	
Recyclability	We're committed to high recyclability of our products and reuse when possible.
	Our LOGIQ Totus contains more than 58% recyclable aluminum and steel. Steel: 29.3% Aluminum: 28.7%
Reduce the use of hazardous substances	EU RoHS directive 2011/65/EU
	REACH (EC) 1907–2006

Packaging

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

Product packaging   Packaging material is recyclable and FSC certified.

GEUK achieved ISO14021 Type II self declarations. Specifically, packing material is the recycled content: Minimum 30% applied to all products produced by GEUK.

Product transportation   Air transport: 96.4%
Ocean transport: 3.6%

Manufacturing

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

Renewable energy   The LOGIQ Totus is manufactured in Seoul, Korea. The facility uses 100% renewable district heating for part of the facility; the rest is a combination of renewable and non-renewable energy.

Reducing electricity   Electricity: 93.80 kW
Gas: 34.19mJ (9.50kW)
Water: 0.3182

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	Operators and clinicians can adjust LOGIQ Totus console for comfort and ease of use. The LOGIQ Totus can adjust in three directions: Keyboard Height: 810mm–1060mm Keyboard Swivel: +/- 45°
	The LOGIQ Totus also has an adjustable monitor: Horizontal: 350mm Vertical: 150mm Swivel: 90°
	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.
	Instructions are provided for use of the equipment to minimize the environmental impact during installation, use, and operation.
Reduce noise	Typical acoustic noise is: 29dB. Max is 31.5dB.

Product utilization

Reduce staff burden

The system is designed to auto freeze after time of inactivity determined by the user.

Guidance for product utilization

Off Mode: 0W

Power consumption

Off Mode: 0W
Standby (no scan): 3W
Ready-to-scan: 170W
Scan Mode: 227W

Carbon emissions

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 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.	Product development and upgrades are ongoing.
Parts harvesting and refurbishment options are provided to reduce waste and environmental impacts while extending imaging access to less advantaged regions.	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. 100% of LOGIQ Totus parts are harvestable for spare parts. 100% of LOGIQ Totus 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 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

Breast Assistant, powered by Koios DS™, offers significant improvement in physician accuracy.

- Improved in sensitivity and specificity for 73% of readers
- Potential reduction in benign biopsies up to 31%
- Detected up to an additional 6 cancers per 100 presented

Thyroid Assistant, powered by Koios DS, helped users across all levels of experience make more informed FNA decisions compared to their own interpretations alone:

- Variability from reader to reader was reduced by 41%—enabling more classification consistency across the department
- Specificity for FNA recommendations improved by 37%—contributing to fewer unnecessary biopsy orders
- Sensitivity for FNA recommendations increased by 14%—reflecting the ability to detect more true positives[3]

Plus, interpretation time fell by 24% compared to non-Koios-aided exams—enhancing the patient experience as well as department productivity. Available in some markets.

Keep your imaging equipment up to date with advanced clinical applications

LOGIQ Totus is 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] Koios Medical internal data. Presented at Society for Imaging Informatics in Medicine annual meeting, 2021

Helping clinicians advance patient outcomes

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 LOGIQ Totus. Powerful XDclear™ high fidelity and broad bandwidth transducers produce high resolution images whether scanning superficial or deep targets.

Drive advancements of precision health

Next generation AI-powered tools drive results and efficiency:

- Auto Lesion Segmentation automatically traces lesion boundaries and generates two-dimensional measurements with just a few keystrokes.

- Auto Doppler Assistant analyzes the location and direction of vessels in an image and then automatically adjusts the color box and angle resulting in greater than 20% time savings and greater than 50% key stroke reduction.

- Auto-Preset Assistant automatically activates the correct preset for the anatomy being scanned. An excellent productivity tool for high-volume settings and practices that see a wide variety of cases.

- Auto Abdominal Color Assistant detects which abdominal organ is being scanned and automatically switches to the optimal color flow parameters, such as gain and scale, for that organ. Can be tailored by the user.

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 provide insights for hospital managers to improve operational performance, asset utilization, and asset performance.
	LOGIQ Totus provides the ability to perform remote viewing of images without compression.
	Scan Assistant provides up to 37% time savings.
Reduce downtime	GE HealthCare's predictive analytics tools reduce downtime, optimize workflow, and reduce service interventions.
	iCenter analytics track metrics and deliver data on equipment status, maintenance history, and performance to help reduce downtime.
	The remote service platform InSite connects you with a GE HealthCare Online Service Engineer or Applications Support Engineer. It has remote diagnostics capability as well as the ability to request service.
	Software updates are available for download via eDelivery.
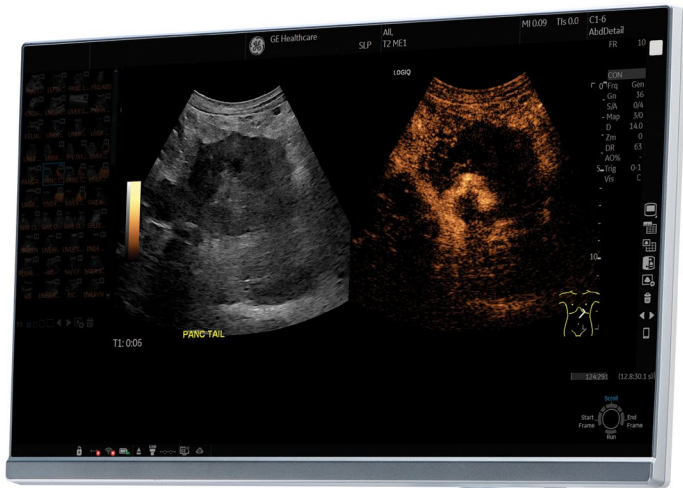
Optimizing imaging operations

Reduce downtime

Digital Expert offers users of LOGIQ Totus the ability to collaborate with remote experts by audio, video, chat, and screen-share. Using a mobile tablet connected directly to your ultrasound equipment, Digital Expert provides users the ability to interact with peers at various locations to get support before, after, or even during an exam.

InSite allows GE HealthCare to deliver remote diagnostics capability. InSite is your direct link with a GE HealthCare Online Service Engineer or Applications Support Engineer, or a Request for Service via the InSite link. Available in some markets.

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	Users can easily access patient information from an external Worklist Server.
	A customizable touch panel allows the user to organize the display in the most efficient way for them.
Reduce exam time	A suite of applications including Auto Doppler Assist reduces exam time by up to greater than 20% and key strokes by up to greater than 50%, and Scan Assistant reduces exam time by up to 37%.
Ease of use	EZ Imaging requires 38% fewer keystrokes than a traditional user interface.
	Hepatic Assistant combines the measurements of 2D Shear Wave Elastography and Ultrasound-guided Attenuation Parameter (UGAP) in a one-click smooth workflow.
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.

Creating a healthy world to help enable better patient outcomes.

GEHealthCare.com/about/sustainability

GE HealthCare