|  |  |
| --- | --- |
| sie_logo_black_rgb | Press |
|  |
|  | April 25, 2023 |
|  | |

Siemens, Siemens Healthineers and UCSF research partnership proves significant energy, cost and emission reduction in MRI machine operation

* **Initiative shows small measures, including putting MRI machines into lowest power mode, can have a big impact**

A partnership between Siemens, Siemens Healthineers, and the University of California, San Francisco has proven medical centers can achieve significant carbon reduction and cost savings by turning off or putting MRIs into the lowest power setting when not in use. The findings, featured in a new [*Radiology*](https://pubs.rsna.org/doi/10.1148/radiol.230441)study, can help the healthcare sector meaningfully reduce its carbon footprint, one that accounts for 4.4% of global carbon emissions.

Working in tandem with UCSF, one of the country’s most prestigious universities focused solely on health, Siemens Smart Infrastructure provided technologies from the Siemens Xcelerator portfolio that monitored and analyzed MRI power consumption data. The Siemens Healthineers team deployed new, greener radiology scanner technology while also exploring ways to reduce standby energy consumption of MRI scanners.

“Often when we talk about how to decarbonize, solutions seem out of reach, but this initiative is proof that innovators everywhere can have impact,” said Barbara Humpton, CEO of Siemens USA. “The technology to decarbonize is here and ours is hard at work, helping industries like healthcare uncover ways to be more efficient and take concrete action to meet their carbon-reduction targets.”

“This research represents a milestone in our journey toward a carbon-neutral future with our customers, for whom this topic becomes more important with every passing day,” said David Pacitti, president of Siemens Medical Solutions USA, Inc. and head of the Americas, Siemens Healthineers. “Starting with MRI scanners, a very demanding technology when it comes to power consumption, we will build on this research to keep finding new ways to reduce our carbon emissions together.”

Hospitals can use twice the power of the average commercial building. Due to their energy intensive operation, imaging equipment and particularly more efficient MRI operation can present a significant opportunity to reduce a hospital’s power usage, costs, and carbon footprint. Using data gathered from Siemens’ power-monitoring and management technologies, it was determined that a substantial amount of power was still being used for cooling in a machine’s “off” mode. Researchers found that turning MRIs off overnight for 12 hours reduced energy usage by 25-33% and enabling an additional “power save” mode, a novel energy feature in Healthineers’ newer MRI scanners, while the machine was off decreased power use by an additional 22-28%.

“The results of this study demonstrate the potential energy and cost savings any radiology practice can obtain by using these simple power-down methods,” said Sean Woolen, MD, first author on the study and assistant professor in UCSF’s Department of Radiology & Biomedical Imaging. “Our goal was to find ways for radiology departments worldwide to reduce their collective environmental footprint.”

In addition to energy savings, researchers found that switching scanners to “off” mode could result in annual savings of $1,717 to $2,943 per year for a single machine. If the machine is switched from “off” to “power save” mode, it could save an additional $1,226 to $1,594 per year.

“If all outpatient MRIs in the U.S. implemented a power save mode instead of an off mode for 12 hours overnight, it would save enough energy to power 6,889 homes a year in the U.S,” said Woolen.

For more information on Siemens’ solution for green radiology, please visit www.usa.siemens.com/smarthealthcare.

**Contact for journalists**

Annie Satow

Siemens USA

Phone: 202-316-0219; E-mail: [annie.seiple@siemens.com](mailto:annie.seiple@siemens.com)

Jeff Bell

Siemens Healthineers

Phone: 484-868-8346; E-mail: [jeffrey.t.bell@siemens-healthineers.com](mailto:jeffrey.t.bell@siemens-healthineers.com)

Follow us on Twitter at: [www.twitter.com/siemensUSA](http://www.twitter.com/siemensUSA)

**Siemens Smart Infrastructure** is shaping the market for intelligent, adaptive infrastructure for today and the future. It addresses the pressing challenges of urbanization and climate change by connecting energy systems, buildings, and industries. SI provides customers with a comprehensive end-to-end portfolio from a single source – with products, systems, solutions and services from the point of power generation all the way to consumption. With an increasingly digitalized ecosystem, it helps customers thrive and communities progress while contributing toward protecting the planet. With around 70,000 employees worldwide, Siemens Smart Infrastructure has its global headquarters in Zug, Switzerland, and its U.S. corporate headquarters in Peachtree Corners, Georgia, USA.

**Siemens Corporation** is a U.S. subsidiary of Siemens AG, a technology company focused on industry, infrastructure, transport, and healthcare. From more resource-efficient factories, resilient supply chains, and smarter buildings and grids, to cleaner and more comfortable transportation as well as advanced healthcare, the company creates technology with purpose adding real value for customers. By combining the real and the digital worlds, Siemens empowers its customers to transform their industries and markets, helping them to transform the everyday for billions of people. Siemens also owns a majority stake in the publicly listed company Siemens Healthineers, a globally leading medical technology provider shaping the future of healthcare. In addition, Siemens holds a minority stake in Siemens Energy, a global leader in the transmission and generation of electrical power. In fiscal 2022, which ended on September 30, 2022, Siemens Group USA generated revenue of $18.6 billion and employs approximately 45,000 people serving customers in all 50 states and Puerto Rico.

**Siemens Healthineers AG** (listed in Frankfurt, Germany: SHL) pioneers breakthroughs in healthcare. For everyone. Everywhere. As a leading medical technology company headquartered in Erlangen, Germany, Siemens Healthineers and its regional companies are continuously developing their product and service portfolio, with AI-supported applications and digital offerings that play an increasingly important role in the next generation of medical technology. These new applications will enhance the company’s foundation in in-vitro diagnostics, image-guided therapy, in-vivo diagnostics, and innovative cancer care. Siemens Healthineers also provides a range of services and solutions to enhance healthcare providers’ ability to provide high-quality, efficient care. In fiscal 2022, which ended on September 30, 2022, Siemens Healthineers, which has approximately 69,500 employees worldwide, generated revenue of around €21.7 billion and adjusted EBIT of almost €3.7 billion. Further information is available at www.siemens-healthineers.com.