



Carilion Roanoke Memorial Hospital, Roanoke, Va.



# 2022

## Sustainability Champions

ASHE honors outstanding leadership in health care decarbonization efforts

INTRODUCTION AND PROFILES BY **BETH BURMAHL**

**T**hree hospitals leading the way in energy efficiency are setting the bar for all facilities striving to reduce their carbon footprints. In recognition of their impressive gains in sustainability, Carilion Roanoke Memorial Hospital, Roanoke, Va., Carilion Rockbridge Community Hospital, Lexington, Va., and Aurora Medical Center in Manitowoc County, Wis., received the 2022 Energy to Care Program Sustainability Champion Awards from the American Society for Health Care Engineering (ASHE) of the American Hospital Association.

The prestigious award recognizes facilities who demonstrate outstanding leadership in health care sustainability.

While each hospital has developed sustainability plans tailored to their needs, this year's award-winners share important strengths including strong leadership, a dedicated staff and a facility-wide culture of sustainability. They are laser-focused on sustainability accountability through audits, tracking and benchmarking. And they share the innovative mindset

necessary to keep up with the rapidly changing sustainability landscape, said Kara Brooks, LEED AP BD+C, senior associate director of sustainability for ASHE.

"The move toward sustainability and the decarbonization of health care is happening very quickly," says Brooks. "This year's Energy to Care Sustainability Champions serve as an example for other hospitals forging their own paths along the road to sustainability. They are making real progress, often in a relatively short span of time."

Introduced in 2016 as the ASHE Energy Care Champion Award, the award was renamed the Energy to Care Sustainability Champion Award in 2022 to reflect a broader focus on sustainability.

ASHE also developed more stringent criteria including requiring quantifiable data to demonstrate sustainability metrics. Hospitals must achieve an Environmental Protection Agency ENERGY STAR® score of 75 or above; be an ENERGY STAR-certified hospital; and track energy, water and greenhouse gas emissions in the ASHE Energy to Care Dashboard. Hospitals also



Carilion Rockbridge Community Hospital,  
Lexington, Va.



Aurora Medical Center – Manitowoc County, Two Rivers, Wis.

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must have a green team, designate a sustainability champion or leader and publish a sustainability statement. All facilities who meet these standards receive the Energy Care Sustainability Champion Award.

All hospitals face significant challenges on the road to sustainability. With their 24/7 lighting, heating and water needs, hospitals consume large amounts of energy. Health care is also responsible for roughly 8.5% of carbon dioxide (CO<sub>2</sub>) emitted yearly. Hospitals play a key role in the global push toward decarbonization, or reducing or removing this abundant greenhouse gas from the atmosphere.

Energy to Care Sustainability Champion Award winners are rapidly reducing CO<sub>2</sub> emissions through energy-efficiency measures like LED lighting, recalibrating thermostats and occupancy sensors, adjusting operating schedules, and rebalancing the air and water flows of HVAC systems. Some are adopting renewable energy sources such as wind, solar and geothermal to power buildings. Many are realizing dramatic cost savings across the board.

While energy typically falls under the facilities department umbrella, even small changes from staff hospital-wide can help create a paradigm shift in sustainability awareness, Brooks says.

“A facilities manager might handle the energy budget, but the entire staff can play a role in energy efficiency and sustainability,” Brooks says. “For example,

a conference room that is frequently used might have its lights on 24/7. A facilities manager could put a sign up, ‘Don’t forget to turn off the lights,’ that reminds staff they are also responsible for saving energy. Staff can shut off all computer monitors at night. Taking ownership of some simple things invests staff members in the energy efficiency process and leads to a culture of sustainability.”

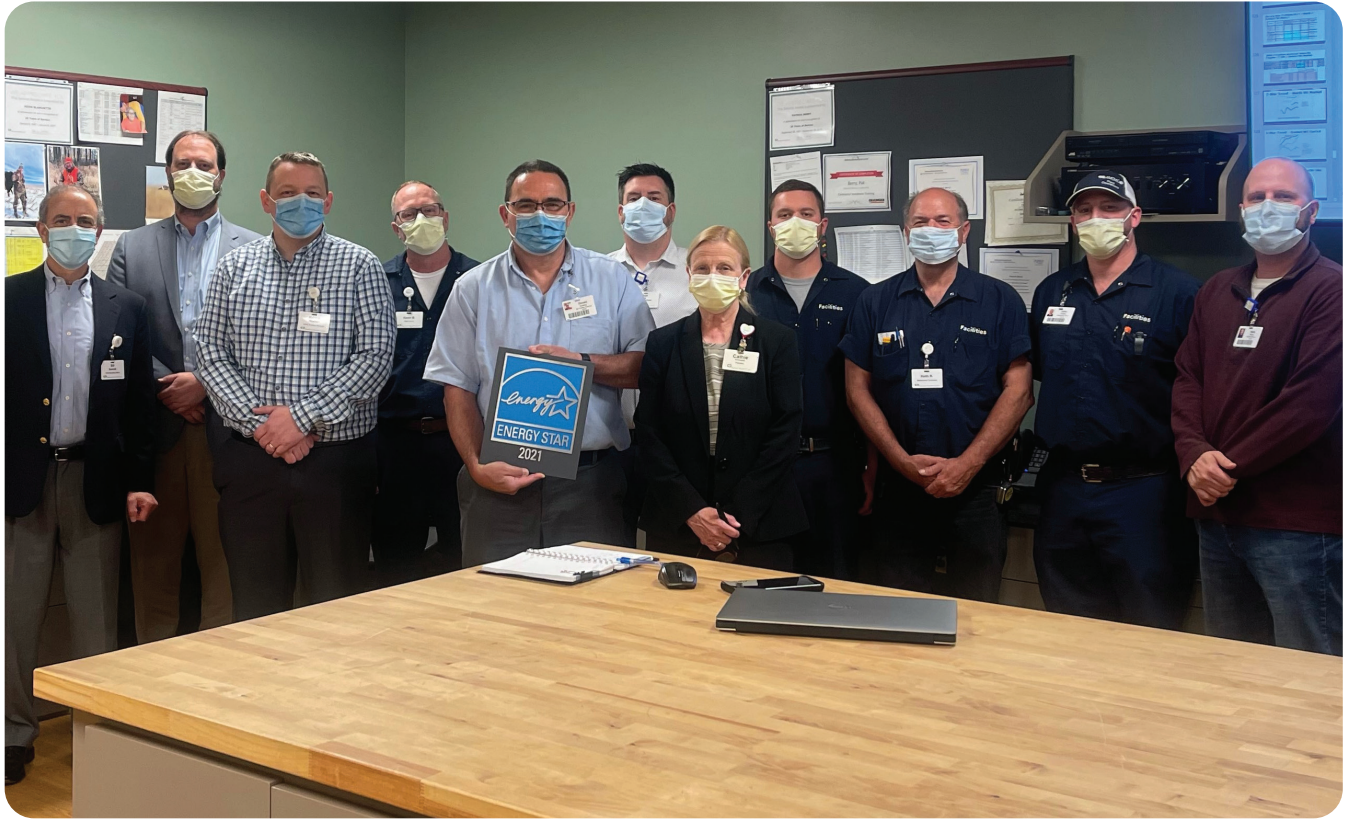
Energy to Care Sustainability Champion Award winners are setting the standard for sustainability in health care, but every hospital can learn from their success.

“No matter where they are in their sustainability journey, all hospitals can make progress if they make this a real priority,” Brooks says. “The entire planet is pushing toward being more environmentally friendly and hospitals play a key role in this effort.”

A good place to start is ASHE’s Energy to Care Program that helps health care facilities track, manage and communicate energy savings. The program provides a robust dashboard that helps health care facilities professionals track, manage and communicate sustainability data. The tool makes it easy to visualize and share sustainability data within facilities. **HFM**

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Gathered to celebrate the announcement of Sustainability Champion award are (from left) Advocate Aurora Health's Bill Santulli, chief operating officer; Jedd Winkler, corporate energy manager; Patrick Wakker, corporate HVAC manager; Kevin Blanchette, senior HVAC technician; Don Hurkley, Aurora Medical Center — Manitowoc County (AMCMC) facilities manager; Jon Lee, safety consultant; Cathie Kocourek, AMCMC hospital president; technicians Brian Walt, Keith Rosado and John Prucha; and Nathaniel Hayes, work order planner.

# Aurora Medical Center – Manitowoc County

Blazing a trail through innovation and leadership in sustainability

**A**urora Medical Center – Manitowoc County in Wisconsin has been harnessing the power of renewable energy since 2017, when the facility installed solar panels on its lower roof.

As part of a broader energy management plan, the hospital partnered with utility companies WPPI Energy and Two Rivers Water and Light to install a solar array. The array's solar panels generate 70,000 kilowatt-hours, which offsets costs that can be redirected to patient care. The energy significantly reduces greenhouse gas emissions, tying into the hospital's decarbonization goals.

In time for Earth Day this spring, Aurora Medical Center completed the retirement of renewable energy credits for calendar year 2021. This is 100% offset with green energy, equivalent to 1,384 tons CO<sub>2</sub>. The hospital was supported by WPPI Energy's renewable energy credit (REC) procurement program.

Such initiatives have earned Aurora Medical Center the 2022 Energy to Care Sustainability Champion Award from the American Society for Health Care Engineering (ASHE) of the American Hospital Association. The prestigious award recognizes facilities that demonstrate outstanding leadership in health care sustainability.

## Health and the environment

Aurora Medical Center is a 69-bed acute care hospital located along the shores of Lake Michigan in Two Rivers, Wis. It is part of Advocate Aurora Health, which operates 27 hospitals and more than 500 outpatient sites as of this writing.

"Personal health is connected to environmental health, and that's why we're committed to supporting personal wellness and preserving a healthy environment," says Jedd Winkler, energy program manager at Aurora Health Care. "We've already made great strides in reducing our carbon footprint through green building and energy efficiency



**FROM LEFT:** Technicians Pat Berry and John Prucha check the operation of a condensing hot water boiler.; a photovoltaic array on the roof of Aurora Medical Center — Manitowoc County; Kevin Blanchette, senior HVAC technician, monitors daily facility performance on the building automation system.

projects. Aurora Medical Center – Manitowoc County has been a bellwether and blazed a trail through innovation and leadership in the application of sustainability and renewable energy.”

The hospital’s sustainability success begins from the top down. Aurora Medical Center – Manitowoc County’s leadership is committed to creating a facility-wide culture of sustainability that invests every staff member in the mission to create a greener, healthier environment for patients and the community.

“Aurora Medical Center – Manitowoc County is proud to receive this prestigious award for our energy conservation efforts,” says Cathie Kocourek, president of Aurora Medical Center – Manitowoc County. “My thanks to all of the team members that contributed to our success.”

The framework is built on the main components of energy management while integrating sustainability components: make the commitment, assess performance, create and execute the action plan, recognize achievement, then restart the process by reassessing the performance. Progress is reflected in the hospital’s metrics. While ASHE requires Energy Sustainability Champions to have an Environmental Protection Agency ENERGY STAR® score of 75 over multiple years, Aurora Medical Center scored a 94 rating in 2022. The hospital maintains or

increases ENERGY STAR levels year to year. Aurora Medical Center scored 93 in 2020 and 92 in 2021.

The hospital’s facilities operations department is the hub of sustainability as the leader on-site for supply and demand-side usage of water, natural gas, electricity and fuel oil. Facilities Manager Don Hurkley keeps the six-member team engaged through daily huddles and regular meetings that keep communication flowing. Using a large monitor and the ASHE Energy to Care Program Dashboard, staff is constantly analyzing energy data and trends like spikes and sudden stops and starts. They also can monitor calculated versus actual energy usage.

The team moves quickly to identify problems and adjust. “Through tracking, we can make equipment improvements, implement setbacks, adjust temperatures and make other changes,” Hurkley says. “It is a lot of work to really monitor your energy level on a daily basis, but it is the only way to reach sustainability goals.”

The hospital is continually searching for new energy-saving projects and has made numerous improvements, including infrastructure planning to include a variable-frequency drive centrifugal chiller to optimize part-load conditions at the central plant, taking advantage of the proximity to Lake Michigan; upgrading to condensing-style hot water boilers;

and installing steam boilers dedicated to process load that save energy and lower emissions.

Building control hardware was also upgraded to allow for advanced sequence of operations, including static pressure discharge air resets on all air-handling and rooftop units to minimize reheating based on the zone level. In addition to those strategies, the corporate HVAC manager redeployed the removed automation hardware at another site, demonstrating the sustainable pillar of reuse.

Smaller efforts are also adding up to big energy and cost savings. Aurora is switching to LED lighting inside and outside the building and will completely transition to LED by 2023. Simple things like asking staff to shut off lights in empty rooms and power down computers not only saves energy but invests employees in the culture of sustainability.

As stewards of the community they serve, Winkler and Hurkley are honored that ASHE has recognized the facility’s work in championing energy efficiency and reducing their carbon footprint. “Receiving this award from our peers that operate hospitals across the nation means so much because they understand the effort it takes to get to a high-performing and sustainable building, given the many demands placed on facilities operations staff,” Hurkley says. **HFM**