Looking for ways to trim costs? Turn out the lights.

That’s a common-sense concept, but failing to abide by it adds up to a substantial waste of energy at most hospitals and takes a significant bite out of their bottom lines. Lighting accounts for about 43 percent of energy consumption in health care facilities, according to the U.S. Department of Energy. Simple reminders to staff and visitors and optimizing building automation systems can have a positive impact on expenses.

But that’s not all. Energy management provides numerous low- or no-cost opportunities to reduce expenses. Hospitals and other health care facilities are energy-intensive operations and are the highest consumers of energy in the commercial sector after the food services industry, according to the U.S. Energy Information Administration. The Environmental Protection Agency reports that hospitals spend more than $6.5 billion a year on energy, and energy costs are expected to climb through 2030.

“While it’s not a big percentage of the organization’s operating costs, energy usage does impact the bottom line,” says Jeff Rich, executive director of Envision for Gunderson Lutheran Health System, La Crosse, Wis. Gunderson’s Envision program includes a portfolio of renewable energy projects and energy service offerings. By focusing on improving energy efficiency, organizations can reduce costs and redirect funds to enhance patient care. The EPA estimates that every dollar nonprofit hospitals spend on energy is equivalent to generating $20 in new revenues.

ABOUT THIS SERIES

H&HN has created this exclusive yearlong series called Fiscal Fitness with the support of the VHA. Finding ways to rein in expenses without sacrificing quality and safety is imperative for hospitals as they struggle to maintain financial viability in a shifting payment system even as their operational costs continue to climb. Over the next several months we’ll look at everything from the supply chain, energy, clinical efficiency, construction, IT and more. Follow the Fiscal Fitness series in our magazine and in our e-newsletter H&HN Daily.
Reducing energy usage also can have a positive impact on the environment and enhance the organization’s standing within the community. The health care industry also contributes to more than $100 billion a year in direct health care costs due to increased asthma and other respiratory illnesses. That’s partly because of hospitals’ high-use of fossil fuels that emit toxins such as greenhouse gases and mercury. Enhancing energy efficiency also creates a more pleasant environment for both patients and staff, says Dale Woodin, executive director of the American Society for Healthcare Engineering, leading to improved patient and employee satisfaction.

A good place to start to become more energy efficient is to conduct an energy audit to determine your organization’s usage habits and to identify opportunities for improvement. “For CEOs, there is a learning curve when it comes to energy management,” says Woodin.

The good news is the returns are rather swift. “Most of the improvements and conservation work has a quick payback within two years,” Rich says. “Some can take up to five years, but they are still good investments.”

### Key benefits of reducing energy consumption in hospitals

1. **Improved profitability**
2. **Reduced impact of volatile energy costs**
3. **Lower operations and maintenance costs**
4. **Improved environmental performance**
5. **Reduced carbon footprint**
6. **Healthier healing and work environment**
7. **Healthier communities**

### Getting started

The move to enhancing energy efficiency is a no-brainer, says Dale Woodin of ASHE. “It’s no different from any other business process,” he says, adding that it’s important to establish a business case and obtain buy-in from staff. Here are key steps to becoming a more energy-efficient organization.

**COMMIT TO ENERGY EFFICIENCY:** Secure commitment from the executive team and the board to become an energy-efficient organization.

**TALK TO YOUR FACILITIES TEAM:** “You may be surprised at how much they know about energy and water usage and the costs associated with it,” says John Ebers of Practice Greenhealth.

**CONDUCT AN ENERGY AUDIT:** The audit reveals the organization’s energy usage and provides an opportunity to benchmark against industry norms. Consider hiring a third party or partnering with your utility to assist with the audit process.

**DEVELOP AN ENERGY MANAGEMENT TEAM:** The energy management team should comprise members of senior management, including the facilities director, the chief information officer and the chief purchasing officer.

**IMPACT PROJECTS:** Focus on short-term projects that will have significant impact, such as retrofitting lighting.

**RETROFIT/REPLACE:** Develop a long-term commissioning plan to retrofit and replace aging or inefficient equipment.

**INVOLVE STAFF:** Solicit energy-efficiency ideas from staff and provide updates on the organization’s achievements.

### CASE STUDY: St. Charles Health System

**BEND, ORE.** Faced with mounting data storage costs, largely due to energy consumption, St. Charles Health System switched to a green data center. The move has reduced power costs by 90 percent and St. Charles estimates a return on investment of $7.1 million over a five-year period. Data centers are high-energy consumers and as the cost of energy continues to grow, the organization looked for ways to offset energy costs and enhance efficiency. “The primary reason for the move was to reduce costs, driven by power consumption,” says Dennis Martin, technical manager. “We are highly focused on improving health care and health care costs. We want to do our part to preserve our environment.” He adds, “With the ROI and the link to the environment, this was not a difficult sale.”

### CASE STUDY: Gunderson Lutheran Health System

**LA CROSSE, WIS.** With the costs of health care and energy rising, Gunderson Lutheran launched an initiative to become energy neutral through renewable-energy and energy-efficiency programs by 2014. The organization believes there’s a strong link between sustainability and fiscal fitness. “It’s the right thing to do for the environment and it’s the right thing to do from a financial perspective,” says Jeff Rich, executive director of Evisor, Gunderson Lutheran’s environmental program. In 2007, the organization’s energy costs increased by $350,000. Through a combination of energy-efficiency programs, including retrocommissioning heating and cooling systems and reprogramming air handling systems, the organization has realized a 25 percent improvement in energy efficiency at a savings of more than $1 million a year. “One of the biggest things you can do is to schedule your heating and cooling systems,” Rich says. At Gunderson, systems were running full time in buildings that were not staffed at night or on weekends. These changes resulted in $78,000 in savings a year. “I come in right on occasion just to see what’s turned on that shouldn’t be,” he says.