# ENERGY-SAVINGS TIPS HEALTH CARE FACILITIES

For every \$1 spent on energy efficiency, health care facilities can save \$20 to \$50 on energy costs.

Most energy efficiency upgrades also improve:

- Patient and employee comfort
- Visual appeal
- Safety
- Indoor air quality
- = Equipment life



### Electricity Use in Health Care Facilities



Source: Energy Information Administration, Commercial Buildings Energy Consumption Survey – 2016.

## HEATING, VENTILATION AND AIR CONDITIONING (HVAC)

- Optimize building control sequences and configure central plants and air handlers to perform efficiently. Implement setbacks to reduce HVAC use during low use or unoccupied hours.
- Install a Building Automation System (BAS) to control HVAC systems. This allows for greater zone control by monitoring and adjusting lighting and HVAC equipment based on occupancy, environment, and weather. According to the Department of Energy, a BAS can save 5 to 15% of the building's energy use with a cost of \$2 to \$4 per square foot.
- Raise the temperature slightly during the summer and lower it during the winter. A one-degree change is not harmful to health or comfort and is frequently unnoticed.
- Have a licensed professional check, clean, calibrate, and lubricate your economizers once a year.

- Most climate control systems use conditioned air to heat or cool buildings. Ensure each register has adequate airflow. Check your filter if there is little airflow or dirt and dust in the register. Replace filters each month to avoid pressure drops that waste energy and reduce performance.
- High-efficiency HVAC units can reduce cooling energy by 10% or more. If equipment is more than 10 years old, consider replacing it with more efficient equipment.
- Maintain/repair boiler steam traps.
- Clean boiler tubes and combustion surfaces.
- Install automatic blow down controls on boilers.
- Use heat recovery ventilators to provide large volumes of fresh air, while reducing the energy needed for fresh air requirements.

#### **OFFICE EQUIPMENT**

- Enable power management features on your electronics.
- Smart power strips have built-in occupancy- or load-sensing devices that shut off devices plugged into the power strip during inactivity. These also typically come with constant-on outlets for devices that need to always remain on.
- Purchase ENERGY STAR<sup>®</sup> certified devices. These devices meet certain energy standards and often require less upkeep than standard efficiency devices.
- Buy a plug load power meter to find out which devices use the most energy. These are available for as low as \$20 and are easy to use.
- Let employees know that saving energy is important and enlist their help. Promote through training, letters or emails, signage, videos, or incentives for energy saving ideas and activities.



Health care accounts for **9%** of energy use in U.S. commercial buildings.

Hospitals spend roughly

8.3 billion

on energy annually.

Hospitals use **2.5–3x** as much energy per square foot as office buildings, on average.

ENERGY FACTS

Health care facilities use an average of **31** kilowatt-hours (kWh) per square foot.

Hospitals are the most **energy-intensive** health care facility, followed by nursing homes, outpatient clinics and medical offices.

#### LIGHTING

- Upgrade to LEDs that can last up to 25 years and reduce energy use by over 90%. If you haven't upgraded to LEDs, get a quote from a lighting vendor or contractor. Idaho Power has incentives available, and projects can lead to paybacks of one to three years.
- Install occupancy sensors in rooms that are often unoccupied.
- Adopt a period of downtime lighting, reducing the overall lighting levels to allow patients to rest while lowering energy use.
- Track maintenance bulbs and ballasts to identify consistency or manufacturing issues.
- Provide photos and installation instructions for different ballasts and lightbulbs to help maintenance.

- Switch exterior lighting to LEDs to reduce energy use, direct light precisely and minimize light pollution. Consider controls that dim or shut off exterior lighting that is not needed during certain times of night.
- Daylighting uses natural ambient light to reduce electric lighting needs. Automatic photosensor controls that sense daylight help ensure electric lighting is reduced when enough daylight is available.





#### **Other Opportunities**

- Retro-commissioning is a good fit for health care facilities because they tend to be energy-intensive, have long operating hours, require large amounts of outside air, and require a lot of equipment.
- Benchmark your building's energy use against similar facilities. ENERGY STAR benchmarks similar buildings and offers certification for the top quartile of buildings in each category.

#### **Additional Resources**

- Register for My Account at idahopower.com/myaccount to pay your bill, get account information, understand your use, and more ways to save.
- Contact your energy advisor for support at idahopower.com/contact-your-energy-advisor.
- Idaho Power has programs available to help customers just like you save energy and money. To learn more, visit idahopower.com/business.



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