12 Proven Energy Saving Strategies for Hospitals

Hospitals are among the most energy-intensive buildings, and every wasted kilowatt-hour or therm diverts dollars from patient care. But major savings don't require big capital projects, just smarter use of existing systems. In our "Boiler Room to Bottom Line" webinar, Thomas Diliberti, Senior Manager—Energy & Sustainability at EnergyCAP, shared twelve proven strategies to cut utility costs, boost efficiency, and improve collaboration between finance and operations. Here's a quick guide to those strategies.



1. Retro-commissioning

Hospitals often assume their systems are working fine, but retro-commissioning consistently reveals hidden inefficiencies. Tom stressed this as the #1 savings strategy, since poorly calibrated systems create both comfort issues and high costs.

2. Energy-efficient lighting

Lighting can be up to 20% of a hospital's utility bill. Replacing fluorescent fixtures with LEDs quickly pays for itself, especially in 24/7 spaces.

3. Operating room unoccupied setbacks

ORs are energy hogs due to strict airflow requirements. Tom explained that even modest reductions in ventilation and temperature when rooms are unoccupied can produce massive savings without compromising safety.

4. Economizers

Often overlooked or misconfigured, economizers should open during mild outdoor conditions to flush buildings with fresh air, and close during humid or extreme weather. Tom noted they're "ripe with opportunity" for savings.

5. Temperature and ventilation setbacks

Beyond ORs, applying setbacks across the facility when spaces are unoccupied helps avoid unnecessary heating/cooling loads.

6. Steam trap repair and replacement

Steam systems are common in hospitals, but failing traps waste huge amounts of energy. Consistent repair/replacement is critical.

7. Thermostat setpoints and standards

Tom emphasized the need for consistent standards (e.g., heat to 70°F, cool to 74°F). Allowing individual preferences leads to simultaneous heating/cooling and wasted dollars.

8. Air handling unit static duct pressure reset

Air doesn't need to be pushed at the same pressure all day. Resetting static pressure based on occupancy/conditions saves significant fan energy.

9. Chilled water reset schedules

Chilled water plants are sized for the hottest day of the year, but that's just one day. Resetting temps the rest of the year can dramatically reduce energy use.

10. Hot water reset schedules

Similarly, resetting hot water temps in milder conditions saves energy without affecting comfort.

11. Supply air temperature reset schedules

Adjusting supply air temps dynamically keeps patients comfortable while reducing unnecessary load on HVAC systems.

12. Filter replacement

Simple, but Tom called it "hard to execute." Regular filter changes across thousands of AHUs/RTUs are vital for airflow efficiency and system health.



To learn how hospital facilities and finance teams can collaborate to manage rising utility costs,

watch the webinar: "From Boiler Room to Bottom Line: Turning Utility Bills Into Budget Insight"

This resource includes material sourced from the ASHE ETC Toolkit (2022)