

# Highland District Hospital OHA PARTNERSHIP FOR ENERGY SAVINGS

**Summary**

- Highland District Hospital, a Highland District Hospital, a critical access hospital, identified energy reduction as a strategy and priority to reduce overall costs.
- Highland District Hospital worked with the Ohio Hospital Association Energy and Sustainability Program to complete an energy audit, which helped identify multiple opportunities for energy reduction and cost savings.
- A combination of projects and operational improvements increased their ENERGY STAR rating to 64, and resulted in significant cost savings including over \$20,000 in rebates from their local electric utility.

**The Problem**

With a changing healthcare landscape and a community business closing, it was imperative that Highland District Hospital reduced its costs not only for the hospital’s budget but to help minimize costs for the patients in its community.

**Strategy Selected**

Senior leadership partnered with the Ohio Hospital Association (OHA) Energy and Sustainability Program to complete the benchmarking process into ENERGY STAR, which included an energy audit of the hospital. This process identified two initial projects: lighting retrofits and replacing boilers/HVAC.

The OHA Energy and Sustainability Program was a natural choice not only because it is free for members, they also bring a demonstrated value and context since they have completed benchmarking for more than 100 hospitals and over 40 hospital energy audits across the state of Ohio. This “no-strings attached” approach delivers transparent and objective recommendations, as well as experience to draw upon other common stories and subsequent remedies from other Ohio hospitals.



Highland District Hospital, a 25 bed critical access hospital, located in Hillsboro, Ohio

**Implementation Process**

As Highland District is a critical access hospital with limited staff, an important part of this project team was the OHA Energy team member. After benchmarking and quantifying the facility’s energy baseline, engineers did a day-long energy walk-through based on the ASHRAE Level 1 audit process. During this initial visit, the OHA Energy team members were able to meet with the CFO, share their findings, and start building the relationship.

This led to the development of a multitude of projects, starting with re-lamping the old side of the hospital building to switch out from T-12 to T-8 bulbs. The Ohio Hospital Association helped to identify and facilitate multiple rebates through the local utility resulting in \$20,000 back to Highland District for the lighting project.

The team looked next to some necessary upgrades to the infrastructure, which included upgrading to two boilers at 80 hp, a 480 volts chiller, and a multistack to recapture heat to meet hot water demand. As this hospital is a pillar in its small community and focused on staying independent, this enabled the senior leadership team to make financial decisions for the long term. Although the boilers and chillers were 50% of their capital budget for 2012, the leadership team made the commitment as they understood that the financial long-term gain was worth the investment.

Finally, there were some operational changes such as occupancy sensors for equipment rooms, streamlined from three to one computer system control for the HVAC, and some variable frequency drives (VFDs) were installed.

## Benefits

- Reduced general maintenance for staff with new equipment.
- Improved employee satisfaction with internal air quality and comfortable temperatures.

## Results

- Energy costs reduced and received \$20,000 in rebates from local utility.
- Improved ENERGY STAR score of 64.

## Challenges and Lessons Learned

One of the challenges that a rural hospital often faces is a disadvantage in the bid process due to travel time. In this particular case, it only extended the length of the bid process, which ultimately added to the overall project time.

Highland District's CEO, Jim Baer, had these three pieces of advice for a CEO of another rural hospital:

1. Look at energy as a significant savings opportunity, especially for the long-term.
2. Look for funding or resources – local providers, the state of Ohio, or other partnerships such as state hospital associations.
3. Start with an energy audit; this gives a roadmap of the short, medium and long term priorities.

Despite its initial success, this is only the beginning for Highland District Hospital. The critical access hospital is anticipating several upcoming projects in order to become an

ENERGY STAR certified hospital. These include implementing an automatic computer shutdown program to further reduce energy, a water conservation program by changing toilets to low flow (1.6 gpf), light sensors for offices and bathrooms, and a parking light retrofit. Additionally, Highland District Hospital has partnered with the local utility service provider to participate in a Continuous Energy Improvement (CEI) hospital and university group.

## Demographics



Highland District Hospital is an acute care critical access hospital (25 beds) located in Hillsboro, Ohio.

The hospital employs more than 340 people, 70 community volunteers, and medical staff includes 60 physicians which represents 23 specialties to service an area of over 65,000 residents in Highland County and surrounding areas.

While Highland District is a community-centered hospital, they are also known for technology and sophisticated healthcare services.