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- LISA COOMBS GEROU - Chief Executive Officer, YMCA of Marquette County

DETAILS>>

"We were pulling cool air directly in, heating it and throwing it back outside," said Lisa Coombs Gerou, Chief Executive Officer (CEO) of the YMCA of Marquette County, Michigan. "With utility costs constantly going up, we couldn't continue to afford these inefficiencies."

CHALLENGES>>

The YMCA's air handlers worked on a constant volume system, bringing in fresh air according to the size of a room. As a result, large spaces like the gymnasium and workout areas were consuming a great deal of energy even when they weren't in use. Maintenance was spending a good deal of time and effort going from room to room attempting to control the temperature.

SOLUTIONS>>

"ESI (Environmental Systems, Inc.) came to the table with an energy solution that would monitor CO_2 (Carbon Dioxide)," said Gerou. "They suggested a system to enable us to heat rooms only when they were in use. It would regulate the flow of air conditioning or heating based on the amount of CO_2 – or 'human exhaust' – that was being emitted into the room, which

would allow us to be much more efficient. By our calculations, the system would pay for itself in two and one-half years."

ESI designed and implemented the system for the YMCA. To save additional money, ESI retrofit the YMCA's air handlers, equipping them with variable frequency drives, CO_2 detection capability and air pressure controls. Digital electronic controls were also added. The temperatures of all areas except for the bathrooms are now controlled according to CO_2 emissions. Bathrooms are controlled for humidity, a more efficient system for small rooms with less usage.

"We've seen huge decreases in energy usage, about 25 to 30 percent," Gerou said. "Because gas and electricity have both increased so much lately, we haven't yet seen the cost savings. But we haven't seen significant cost increases like most other buildings either."

Overall, Gerou feels that the new system provides both sustainability and bottom line benefits for the YMCA. "I would hope that more facilities make this change," she said. "I think in the long run, the emissions, cost savings and recycling of air are much more beneficial for an organization."

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THE BENEFITS

Another benefit of the system installed by ESI has proven to be its ease of use. "Everything is right there on the computer, which can even be accessed from home," Gerou noted. That reduces the amount of man-hours required to maintain the system. It also enables ESI to deliver real-time support if needed. "Plus, we have the added advantage of being able to monitor and track our energy consumption. Staff – and Board members – can easily see that the expenditure is justified by viewing the on-line reports."

Other ongoing benefits include:

- Improved comfort levels and a much quieter environment for patrons
- Fast service response through remote access and control
- Reduced downtime because operators can view energy and performance data to quickly identify and react to problems
- A more user-friendly system
- Increased longevity of motors due to soft start-up
- Confidence that any problem will be dealt with quickly and accurately
- A partner that can be relied on for a range of expertise

From innovative designs and installation to comprehensive management and support, ESI provides integrated, performance-building solutions that generate success stories. Contact us to find out how we can help you improve your building performance.

