The Carver County Government Center in Chaska, Minn., is a picturesque campus, located next to the Minnesota River on a small, managed trout lake. The property is a popular site for outdoor enthusiasts who come to fish, use the public trail system, and enjoy the natural environment. What many area residents and visitors may not realize is that impressive resource management and conservation efforts are occurring inside Carver County buildings, as well—in Chaska and surrounding communities.

"As government evolves and comes out of this recession, taxpayers are looking for more value out of our services. Moving forward, we plan to use EMS for more facility assessments and continued utility cost analysis."

Kevin Maas, Carver County

Like most local governments around the country, Carver County faces mounting pressures to operate more efficiently and to be good stewards of both taxpayer dollars and the environment. One strong focus in this suburban county is energy efficiency. Carver County officials are very proactive in identifying ways to reduce energy usage and demand in county-owned buildings.

Energy Management Solutions (EMS), Inc., of Chaska, Minn., an independent provider of energy management services, is a key partner in these efforts. Since 2008, EMS has been helping Carver County develop and implement strategies that conserve energy, lower utility bills, and improve its bottom line.

"In 2008, we were looking at doing an energy conservation and deferred maintenance program to bring our facilities up to date," said Kevin Maas, facilities services manager, Carver County, who manages around 500,000 square feet at 14 different sites. "We were working with our control company on an energy performance contract, and (EMS President) Gary Swanson, being a local business owner, read about the project. He approached us and suggested that hiring EMS might be a better alternative."

EMS’s expertise and creative ideas impressed county facility managers. After reviewing the open book numbers and meeting with the county’s finance department, they determined working with EMS could save significant money.

“We brought EMS in as part of the design team for our new central plant project,” Maas said. “Swanson’s...
EMS provides the following energy management services for commercial and industrial customers of Carver County:

- Facility Assessments
- Energy Efficiency Project Identification
- Utility Cost Analysis
- Heat Loss Analysis
- Energy Conservation Education and Training
- Technology Evaluation
- Financial Incentives Procurement

Experience and knowledge saved us upfront capital costs and prompted us to look at things, such as buying natural gas on a bulk rather than retail basis.

Early energy- and cost-saving recommendations identified by EMS included replacing chillers and boilers with more efficient models, resulting in annual savings of nearly $47,000, and forgoing replacement of an existing motor for a one-time capital savings of $600,000. EMS helped the county negotiate a new municipal gas contract, eliminating the need for a backup propane system and saving $180,000 in capital costs. It assisted the project’s engineering firm in the selection and sequencing of high performance pumps with NEMA premium motors and energy-saving variable speed drives. It also connected the county with valuable rebates and federal tax credits for energy-efficient lighting and heating, ventilation, and air conditioning improvements. Accumulated savings from these and other efforts have exceeded $1 million and continue to grow.

One benefit of working with EMS is its willingness and ability to help clients maximize rebates and utilize tax incentives to offset the initial costs of energy conservation improvement projects. In working with Carver County, EMS identified a creative funding mechanism through which it traded federal public tax credits for engineering services.

“We continually look for new ways and approaches to help our clients pay for energy-related improvements,” said Gary Swanson, EMS president. “Our knowledge of available tools and incentives can assist local governments as they try to do more with less.”

Partnering with EMS has given Carver County officials a better understanding of how the county uses energy and ways to lower costs. EMS now performs all of the county’s benchmarking and energy calculations and has helped organize information related to natural gas, electricity, and water utilities.

“Moving forward, we plan to use EMS for more facility assessments and continued utility cost analysis,” Maas said. “As government evolves and comes out of this recession, taxpayers are looking for more value out of our services.”

EMS works with clients across the United States and in other countries, including Mexico, Panama, and Brazil, yet it maintains a personal, hometown approach when dealing with local governments.

“We are a small county with a relatively rural population,” Maas said. “EMS staff members are friendly, professional, and have made a real effort to get to know us and understand our mission and goals. That means a lot.”