Green is a primary color at Members Cooperative Credit Union (MCCU). It goes beyond the financial institution’s logo and brand identity. MCCU has adopted an approach to business that values energy efficiency and environmental sustainability.

That commitment is evident in MCCU’s facilities, where extensive energy conservation projects have been completed or are planned. One clear example is the credit union’s new data and call center in Duluth. The building is a model of energy efficiency with innovative lighting and a progressive heating, ventilation, and air conditioning (HVAC) system that is uncommon in this type of facility.

The system uses closed-loop heat pumps with an energy recovery unit to draw excess heat from data servers and carry it to offices, conference rooms, and other parts of the building where it is needed. The system keeps the server room cool so valuable data equipment does not overheat—without traditional rooftop HVAC units.

Building designers were skeptical when Minnesota Power energy consultant Tanuj Gulati, of Energy Management Solutions, reviewed project plans and suggested the closed-loop heat pump system. After reviewing careful research about the technology, estimated potential energy savings, and calculated rebates, MCCU decision makers saw the value in the investment. Minnesota Power is monitoring the system’s performance.

“We took a chance with an HVAC system that has not been used extensively in information technology (IT) settings, and it is working very well,” said Janet Vold, vice president, IT, MCCU. “Pulling heat from the server room and reusing it makes sense from an energy-efficiency standpoint, and the building is very comfortable.”

Other energy-conservation features were incorporated into the facility, as well. They include high performance 28-Watt T-8 fluorescent lighting with daylight and occupancy sensors; exterior induction lighting with timers and photo eyes; an air curtain at the front door to keep cold winter air from entering the building and to reduce conditioned air losses; low flow faucets with automatic shutoff controls; and high efficiency hand dryers.
Combined, these measures will conserve over 121,000 kWh of electricity per year, reduce monthly demand by nearly 21 kW, and help MCCU avoid up to $10,000 per year in energy costs. They qualified for $7,742 in POWERGrant rebates from Minnesota Power and will pay for themselves in less than 10 years. This system-based approach to energy efficiency focuses on achieving building-wide, cost-effective energy savings that not only reduce usage but also enhance productivity.

“Energy-efficient technologies exceeded our budget, but MCCU leadership agreed it was smart spending,” said Robin Ongaro, vice president of marketing and business development, MCCU. She brought Minnesota Power’s energy consultants into the project and has championed conservation upgrades throughout the MCCU system.

MCCU’s Cloquet branch recently converted to energy-efficient lighting with lighting controls. About 350 fixtures that used to require three 32-Watt fluorescent bulbs now deliver better light using two 28-Watt bulbs—a savings of 40 Watts per fixture!

“It adds up to considerable savings, and we have brighter, whiter light,” said Steve Schwartz, facilities and security coordinator, MCCU. He recently completed Building Operator Certification (BOC) training, which was sponsored through Minnesota Power’s conservation program. “BOC training gave me a good overview of building systems and how they work together. It left me feeling qualified to improve the performance of our facilities.”

Schwartz has already put his knowledge into practice with the lighting upgrades in Cloquet and a project that converted exterior signs at the Miller Hill branch to light emitting diodes (LEDs). These projects received additional POWERGrant rebates, and Minnesota Power rebated Schwartz’s BOC tuition.

“MCCU is showing real leadership,” Gulati said. “It is rewarding to work with an organization where energy-efficiency is a high priority and that commitment is demonstrated through choices and actions.”