

CASE STUDY
COLORADO

Pellman's Auto Sees the Light

Set on Efficiency

Finding ways to offset the environmental impact of the business has always been a priority at Pellman's Auto in Boulder, Colorado. The automotive repair and maintenance shop decreases waste and energy use wherever possible, offers bikes instead of cars for customers who need transport while waiting for service, and buys environmentally-friendly materials whenever they can.

When the time came to make two major changes at the 12,000 square foot facility, they knew they would incorporate efficiency. First, they installed new lights to create a brighter space indoors. Second, by installing solar panels they captured the sunshine to help generate their own power.

And they got some welcome help for both projects.

A Perfect Partnership

Lisa Pellman, co-owner at Pellman's Auto, says the problem began with lighting that was too dim, cost too much and constantly buzzed in several offices. She started by having an energy expert review the fixtures and determine a better option.

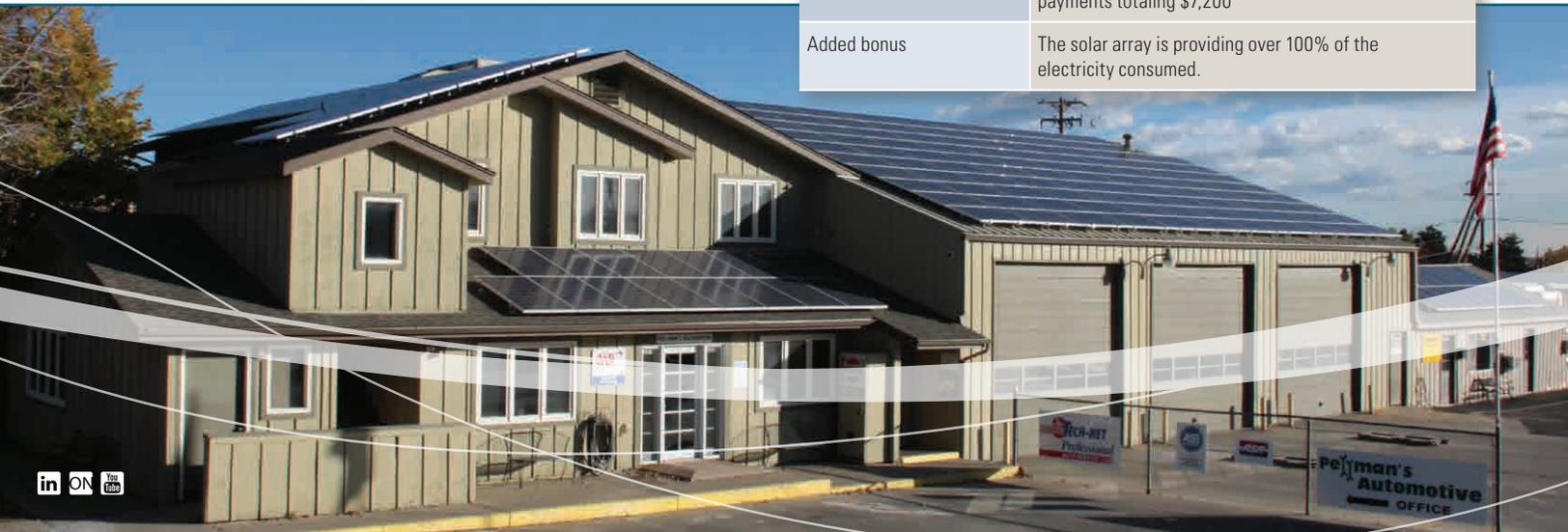
"That's when we learned that Boulder's EnergySmart program works with Xcel Energy to help customers like us determine rebates to offset the cost of new equipment," says Pellman. "The rebate amounts were more than half the cost of the project so it made our decision easy."

The partnership is simple: EnergySmart provides rebates and expert advice for the efficiency work. They can also find other rebate opportunities through Xcel Energy to further defray the costs.

"The whole process was painless for us," says Pellman. "The lighting assessment provided a recommendation along with projected savings, rebate options and a break-even point. We probably would not have done the lighting upgrade had the rebates not been available."

LIGHTING PROJECT SNAPSHOT	
Project	Installed T8 to replace T12 lighting in maintenance area and offices and upgraded to CFLs in several areas
Cost before rebate	\$9,822
Xcel Energy rebates	\$4,692
Boulder County EnergySmart rebate	\$1,077
Cost after rebates	\$4,053
Estimated annual savings	37,879 kWh According to the EPA carbon emission calculator, this is the equivalent of saving CO ₂ emissions from 2,996 gallons of gasoline or enough energy savings to power 4.5 homes in Colorado. The measure improved the company's energy efficiency by 15 percent.

SOLAR PROJECT SNAPSHOT	
Project	48.5 kW solar panel installation
Cost before rebate	\$167,000
Xcel Energy rebates	\$10,000
Federal tax credit	\$50,170 (30 percent of the total cost)
City of Boulder sales tax rebate	\$330
Cost after rebates	\$4,053
Cost after rebates and incentives	\$106,500
Elevations loan amount and rate	\$48,000 loan at 3.5 percent (other financing used for balance)
Estimated annual savings	\$8,700 plus Xcel Energy Solar*Rewards® payments totaling \$7,200
Added bonus	The solar array is providing over 100% of the electricity consumed.



Getting Started

Pellman moved from T12 to more efficient T8 lighting and replaced incandescent lights with new CFL bulbs. They were able to retrofit the fixtures and install new electronic ballasts. They decreased the number of bulbs in each fixture to provide brighter light that doesn't make any noise.

"The contractors took care of all of the details, including filling out the paperwork," says Pellman. "They performed quality installations that met their projected savings and timeframes."

The measure resulted in a 15 percent decrease in energy usage and lower energy bills. Pellman is also happy to report that her employees love the new lights, new look and quieter offices.

Catching Rays

Once the lighting project was done, they looked to fulfill their next dream: harnessing the sun's energy and put it to use at the business.

Pellman and some of her colleagues attended a seminar on environmental savings for businesses and learned that other similar-sized businesses had solar panels installed. She suddenly realized she could do it, too. She gathered bids and contacted EnergySmart to get help through the process.

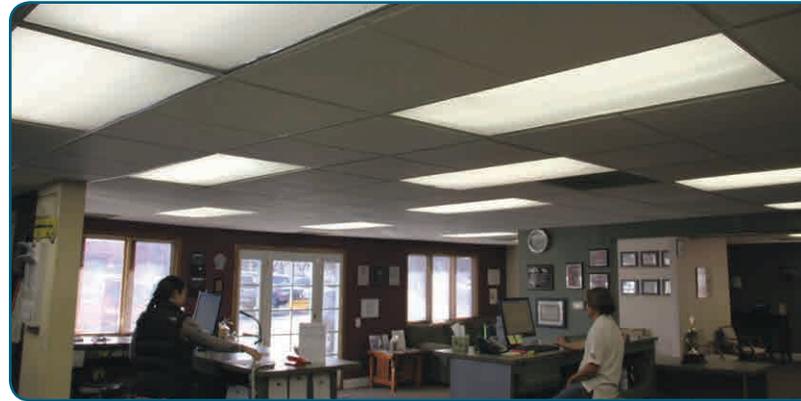
Her timing couldn't have been better. EnergySmart found \$10,000 in efficiency rebates offered by their electric utility, Xcel Energy, and helped them qualify for a Renewable Energy Credit (REC) purchase contract for 20 years at \$0.11 per kWh, meaning they get checks from Xcel Energy each month.

EnergySmart also revealed a federal tax credit, a tax rebate from the city of Boulder and a new program through Elevations Credit Union that provided a low interest loan to help them finance the rest of the project. As it turned out, Pellman was Elevations' very first client in this new offering. The low interest rate they offered on the \$48,000 loan sealed the deal.

Within months of realizing she might be able to pull it off, Pellman watched Cascade Solar install her new 48.5 kW system. Without the collection of rebates and incentives, it would not have been possible.

"We love our solar array and our employees love knowing they work for a company that's helping produce its own energy," says Pellman. "The process was really easy because the entities involved worked together to make everything go smoothly."

Pellman points out that the project also helped them reduce their demand. An e-gauge was installed in the lobby, which shows how



much energy is being used at the facility at any given time. It's proven an effective topic of conversation for staff, who love a chance to talk about the solar work.

The project also received attention in the community. The Boulder County Commissioners awarded Pellman an EnergySmart Business Award for business innovation.

Next Steps

Pellman is always on the lookout for ways to continue saving and reducing their carbon footprint. And she's able to reinvest dollars saved on efficiency projects into the next big thing. Next up? She'll replace the service area garage doors with insulated, remote-controlled models.

"Now that we've implemented some energy efficiency improvements and we realized how easy it is, we're eager to do more," says Pellman.

To learn more about the Energy Efficiency Finance program and other efficiency rebate programs offered by Xcel Energy, visit xcelenergy.com/Energy_Solutions/Business_Solutions.