

Checking Out SIEA's Empower Program The tale of a local library embracing beneficial electrification

YOUR CO-OP NEWS

Now emission-free, the La Veta Public Library features new high-efficiency air handlers; low ambient temperature heat pumps; two electric thermal storage (ETS) heaters; electric strip heaters as a back-up heat source in case of an emergency; new thermostats; an additional 16 inches of blown-in attic insulation, as well as upgraded insulation in the crawl space, walks and rim joists; an upgraded electric panel to accommodate a higher electric load; and an 84-inch Hunter TRAK high-volume, low-speed fan.

ore and more of our energy is coming from the electric socket. The shift is growing with the adoption of electric vehicles, high-efficiency HVAC systems, and new water-heating technology, among other things. There are many motives for fuel-switching, from personal preferences to practical ones. Many tout air quality benefits in switching to electric heating and cooling technologies. Additionally, electricity costs are more stable and often lower than those of propane and, at times, natural gas costs. Recognizing these advantages, the government has also introduced tax incentives to encourage the conversion from gas to electric for both residential and business purposes.

While there are tax incentives and rebates available to ease the financial burden, the cost of converting to electric can still be steep. Nevertheless, in cases of new construction or when existing appliances are approaching the end of their usable life, transitioning to an all-electric setup can be cost-effective, especially if existing ductwork can be retained.

Take, for example, the La Veta Public Library. When the aging air conditioning and heating units failed, library leadership staff turned to San Isabel Electric for assistance. SIEA's Energy Services team conducted a thorough evaluation of the facility and informed the library about an available grant that covered 50% of the project costs.

Environmental benefits of zero emissions is part of the library's long-term strategy, but the decision to switch from propane to an all-electric system was primarily driven by practical considerations. Its HVAC system had stopped working, and another significant factor was the inability to host a propane tank on library property. This issue became more pressing when the property hosting their tank went up for sale, leaving the library uncertain about the tank's future availability.

Library Director Tony Masinton contacted SIEA when the library's heating and cooling system failed. There were no other qualified commercial contractors available to handle the project's scope. "You were our first and only option," Masinton explained, underscoring why he sought advice from the electric cooperative.

Although the library received a competitive bid from a contractor in Colorado Springs, the proposal didn't adequately meet the building's electrical requirements and would have encroached on valuable library space needed for shelving and public use.

Through SIEA's Empower program, the library was able to utilize and repair existing ductwork, ensuring a seamless project that didn't disrupt library operations or services. SIEA's Energy Services staff also handled all the paperwork for eligible rebates, incorporating the rebate savings directly into the project.

Masinton commended the experience, saying, "It was a really pleasant experience. Jack [Snell, SIEA Energy Services Manager] was really good at finding and coordinating contractors. He did an excellent job of keeping us informed during delays caused by remote work and supply chain issues. He even made personal visits to ensure things were on track."

The core of the La Veta Library's building was built in the 1870s. Since then, it has been physically moved to different locations in town three times. Today, the building is protected by historical preservation laws and part of the La Veta Historic District.

This HVAC project is an excellent example of how historic buildings, even ones protected by preservation laws, can be successfully and sympathetically adapted to take advantage of "green" or "zero emission" energy technologies, thereby extending their lives and helping them to continue contributing to their communities, Masinton also noted.

The Energy Services team projected the library will see energy bill savings in the first few years, and a full return on their investment after 10 years. The library is especially thankful that half of the project was paid for by a grant from the Colorado Department of Local Affairs.

SIEA's Empower program offers energy efficiency guidance, products, services, and financing to underserved areas in southern Colorado. Whether your project is large or small, with a budget of \$500 or \$50,000, or even if you just need an energy assessment for your home or business to save on energy bills, our team is here to assist you. Don't hesitate to reach out — let's start a conversation.



siea.com/empower Call us: 800-279-SIEA (7432)

YOUR CO-OP NEWS



YOUR CO-OP NEWS

HAVE STEM PROJECTS, WILL TRAVEL

n a partnership with the Colorado State University 4-H Extension Office, Colorado's electric cooperatives sponsor a mobile energy lab to inspire kids to learn about modern energy generation, energy sources, and energy-efficiency practices.

The customized trailer is full of functional hands-on projects, activities, and materials focused on the experiential learning of science, technology, engineering, and mathematical concepts — all related to energy. The trailer has been used at county fairs, community events, and schools.

In September, when the trailer rolled up to Liberty Point Elementary in Pueblo West, the fourth and fifth graders reported that it was "the best day ever!"

"Students are curious about how mysterious all of the different types of electricity [are] and how they all work! It was a great morning of science," said Liberty Point Elementary School fourth grade teacher John Trivisonno.

SIEA extended the adventure to seven southern Colorado schools in its service area in September and October. Nearly 700 elementary-age students were introduced to a series of experiments that required them to use their minds and bodies to physically reveal the mysteries behind how magnetic fields are used in construction and to generate energy in turbines. They even witnessed static electricity, polarization, and more.

In addition to visiting Liberty Point Elementary, the trailer visited Peakview Elementary in Walsenburg, Rye Elementary, Gardner Valley Charter School, and the La Veta, Branson, and Primero schools. Toby Swaford, K-12 4-H STEM state specialist at Colorado State University, is the driving force behind these STEM adventures. He is passionate about engaging and educating young people and brings amazing ideas to the Energy Lab. With a background in designing user experiences, Toby creates STEM projects that are interactive and fun.

The Colorado Rural Electric Member Services group sponsors the Colorado 4-H Energy Trailer.

The "pop-up" classroom on wheels is ready to make an educational pitstop anywhere across Colorado and travels around the state on a three-year rotation. Throughout the year, Toby tirelessly hauls the trailer to the state's five 4-H Extension regions (southern Colorado, Front Range, Eastern Plains, mountain region, and Western Slope) offering roughly four months of fun-filled education for local kids.

Colorado's electric cooperatives are innovators in the electric industry and leaders in their communities, sponsoring several youth programs, including the 4-H Mobile Energy Lab through their member services group. They are always looking for new and creative ways to further their impact and connect with electric cooperative members. When presented with an opportunity to give kids hands-on learning opportunities about energy concepts, the state's electric co-ops enthusiastically raised their hands with a clear answer: "Yes — we'll do it."

If you're interested in scheduling a visit from the 4-H Mobile Lab, please note that availability is limited to Colorado's 4-H agents. To bring these engaging STEM experiences to your event or school, contact your local 4-H office for more details.



Gardner Valley Charter School second grade buddies Anthony Marquez (left) and Alfonso Aguirre III (right) harness the power of magnets to build a tower and the bond of friendship.



Gunner Menegatti and Kaydence Tenorio turn light waves into sound waves with flashlights and a solar panel during the 4-H Mobile Energy Lab's visit to Gardner Valley Charter School.



The 4-H Mobile Energy Lab's hand-crank Pedal Power experiment teaches young scientists Isaiah Marquez and Vivienne Newman that it takes about 90% more energy to power traditional incandescent bulbs compared to LED bulbs.



Families, friends, and neighbors from near and far gathered together in Walsenburg at the old John Mall High School for San Isabel Electric's annual meeting of the membership on September 16. It was the last time the meeting was at the old high school, since the new school is expected to open in January. Members in attendance received a locally made ceramic mug as part of their annual meeting gift. Take a look at the page to the left for a fun numerical recap of the meeting.

San Isabel Electric Scholarship Steps



