



Estes Park | Fort Collins | Longmont | Loveland



Project highlights



873,548

kWh saved
annually



\$49,600

received
in rebates



\$100,977

saved annually

Precise studies, real savings

In 2024, the southern medical building at UC Health's Medical Center of the Rockies (MCR) in Loveland participated in the Efficiency Works Retrocommissioning (RCx) program.* Through this program, the facility enhanced its HVAC system performance by optimizing scheduling and economizer functions and implementing dynamic control operations.

The RCx study not only helped MCR identify key operational improvements but also deepened their understanding of the building's mechanical systems. With support from Efficiency Works' Building Tune-up (BTU) program, incentives helped offset the cost of the study, making the investment even more impactful.

As a result of these efforts, MCR is projected to save over \$100,000 annually in energy costs, reinforcing their commitment to sustainability and operational excellence.

UCHealth participated in the Efficiency Works RCx program and experienced outstanding results. The application and confirmation process was straightforward and well-supported by the engineering team, making implementation smooth and efficient. The return on investment has exceeded our expectations, and the low implementation costs played a significant role in delivering such strong outcomes. We're fortunate to have access to such a great rebate program in our region.

-Darren Boyle, MS

Director Facilities Management
Medical Center of the Rockies



About Efficiency Works

Efficiency Works is a regional utility collaboration that provides guidance and resources to enable customers to use energy effectively, work toward a noncarbon energy future and build strong, resilient communities for customers served by Platte River Power Authority and its owner communities of Estes Park, Fort Collins, Longmont and Loveland.

Visit EfficiencyWorks.org for more information.

*Scan the QR code to learn more about the Efficiency Works Building Tune-up program, including the RCx program and its eligibility requirements.

Retrocommissioning

Project summary

- Completed a comprehensive Retrocommissioning (RCx) study valued at \$40,000, analyzing over 2 million kWh of annual energy usage. The cost of the study was fully offset by Efficiency Works incentives.
- Utilized free cooling by enabling the economizer system, reducing reliance on mechanical cooling.
- Implemented a supply air temperature reset, allowing for the roof top units (RTUs) to dynamically adjust for building load using a trim and response protocol aligned with ASHRAE standards.
- Employed a duct static pressure enabling supply air fans to modulate speed according to occupancy levels and real time demand.
- Optimized HVAC scheduling to reduce or shut down fan and cooling operations during unoccupied hours.
- Completed energy conservation measures within one year of the application preapproval date, qualifying UC Health for the Efficiency Works timely implementation bonus incentive. This \$9,600 incentive was applied directly to implementation costs identified in the RCx study.

Measure details

ECM #	Energy conservation measure	Budget cost	Electric savings (kWh)	Total cost savings (per year)	Simple payback (years)	CO2 saved (tons)
1	Economizing optimization	\$1,826	59,693	\$6,964	0.3	42
2	Supply air temperature reset	\$1,741	111,802	\$10,997	0.2	63
3	Duct static pressure reset	\$2,075	80,615	\$9,404	0.2	57
4	Cooling lockout	\$222	43,167	\$5,036	0.0	31
7	Space temperature setpoint adjustment	\$1,920	29,036	\$3,387	0.6	21
8	Schedule optimization	\$1,826	549,235	\$65,189	0.0	398
Totals		\$9,609	873,548	\$100,977	0.2	612

Additional information and benefits

In addition to reducing their annual energy costs, UC Health:

- Extended operational lifespan of their HVAC equipment by optimizing performance and reducing unnecessary strain.
- Advanced progress towards compliance with Energy Performance Standards goal through Colorado's Energy Performance for Buildings law by reducing their Energy Usage Intensity (EUI) score.
- Enhanced their understanding of their facility's energy usage and Building Automation System (BAS).
- Received recommendations for future energy efficiency improvements from their service provider, McKinstry, complementing the findings of their RCx study.