## FROM REPAIR TO RENEWAL:

## LIBRARY FUTURE-PROOFS ITS INFRASTRUCTURE WITH COMMUNITY ENERGY

When the Akron-Summit County Public Library faced aging infrastructure and escalating maintenance costs, its leadership made a bold and future-facing decision—to connect the Main Library to Akron's district energy system. What began as a response to failing mechanical systems has since evolved into a strategic move that's improving building comfort, cutting risk, and contributing to the broader revitalization of downtown Akron.

Peter Schantz, the library's Facilities Director, recalls the state of the building's energy systems when he started three years ago. "The building was renovated in 2004, so all of our HVAC equipment was at least 20 years old—some even older," Schantz said. "Our chillers were failing. They couldn't maintain temperature, they were leaking refrigerant and constantly tripping on high temperature and pressure faults. Our boilers had tube leaks, the 4,500-gallon tank for the cooling tower was leaking, and all of that was directly over our special collection's archives. The cooling tower itself was literally falling apart."



"The community energy system has significantly improved the comfort in our buildings. We now have an uninterrupted supply of chilled water and steam. Eighteen months ago, that simply wasn't the case."

Peter Schantz, Facilities Director, Akron-Summit County Public Library



Faced with more than \$2 million in projected capital costs to repair or replace this failing infrastructure, the library began looking for a better path forward. At the same time, Akron Energy Systems (AES) was extending new steam and chilled water lines along Main Street—right past the library. "I recognized that we had an opportunity to pursue an alternative to that very large capital investment," Schantz said.



Peter Schantz, Facilities Director, Akron-Summit County Public Library The library hired an engineering firm to assess both the financial and technical feasibility of joining the community energy system. What they found made the decision clear. "It became obvious that this was the right way to go," said Schantz. "We negotiated a contract and rates that made sense for us, and the transition was pretty seamless."

That transition included designing an interface between the library's hydronic system and AES's steam and chilled water network. The result has been transformative—not just operationally, but in terms of energy resilience and comfort.

"The community energy system has significantly improved the comfort in our buildings," Schantz noted. "We now have an uninterrupted supply of chilled water and steam. Eighteen months ago, that simply wasn't the case."

Beyond immediate improvements, the library sees long-term benefits. "In my experience, there are two major advantages to moving to a community energy system," said Schantz. "First, you avoid huge capital costs to replace your heating and cooling plant. Second, you shift the cost and risk of maintaining that plant over the next decade or more. That risk is now carried by AES, and they're focused on what they do best—making steam and chilled water. We're a library; we're not in the business of producing thermal energy."

Schantz was particularly impressed with AES's plant after a tour. "It's state of the art," he said. "They have considerable excess capacity and redundancy. Their water treatment facility is top notch, and they're installing a combined heat and power system. That means they'll use the same steam that heats buildings to also generate electricity. It's smart, efficient, and reliable—especially important during something like a winter power outage. That kind of resilience means everything when you're trying to avoid frozen pipes in sub-zero temperatures."

But the implications of the switch reach beyond the library itself. Schantz believes Akron's community energy system is a key asset for economic development downtown. "By avoiding our own capital reinvestment, we were able to redeploy those funds toward programmatic improvements," he explained. "If ten buildings downtown connect to this loop, imagine the collective investment that could be redirected from equipment replacement to public-facing projects."

What started as a response to failing infrastructure has become a model for municipal-scale innovation. Akron's investment in community energy is not only saving money and reducing risk for its institutions and businesses—it's also fueling the city's vision for a revitalized and resilient downtown.

