Community Impact Report 2021









Where Others See a Challenge, We See an Opportunity

During a global pandemic, continuity can be a comfort. Akron Energy Systems provides an essential service to our community, so delivering heating and cooling products without interruption has been our primary focus these past few years. But, in keeping with our mission to positively impact our community beyond the essential services we provide, Akron Energy Systems saw an opportunity in the challenges posed by COVID-19.

The safety of our customers and staff was a priority. Previous investments in technology allowed Akron Energy Systems to complete contact-less system monitoring and inspections. Also, our environmental health and safety manager developed comprehensive pandemic safety protocols, including guidance on personal protective equipment (PPE), testing, mandatory quarantine protocols, and sick-leave policies.

While the past year presented challenges, we did not lose sight of our overall objective — investing in the power of community. The impact of our efforts is evident in the system improvements Akron Energy Systems achieved. The centerpiece of those improvements is the Main Street Corridor project in downtown Akron. As part of this transformative infrastructure project, Akron Energy Systems made significant upgrades to our system. These include replacing steam and chilled water piping, condensate return lines, service access portals, and valves. Akron Energy Systems also completed a chilled water connection at the Mayflower Manor apartment building. Part of a \$10-million renovation project, the new connection ensures that the building's tenants will receive chilled water for cooling along with the existing steam heating service.

As part of the City of Akron's clean energy initiative, Akron Energy Systems partnered with Bounce Innovation Hub on a solar power project and will spearhead the city's service vehicle electrification program.

We also continued to empower the community by committing our resources to the Akron Marathon, Lock 3, Joy Park's HolidayToy Drive, food drives through St. Bernard's Parish, a bicycle giveaway, and numerous educational and career advancement programs.

With the addition of the Civic Theatre and the Akron Summit County Public Library's main branch, our customer portfolio also grew in 2021. In addition, there are several exciting opportunities on the horizon, including further development of our Renewables service offering, continued system improvements to increase efficiencies and reduce our environmental impact, and expansion of our service area.

As part of our investment in the power of community, we will continue to focus on the advancement, health, and sustainability of Akron's residents, businesses, and institutions.







Our Impact on the Community is Where the Energy Is

As the City of Akron's community energy system operator, it is our responsibility to deliver a finished heating and cooling product to buildings in the city's downtown business district. But we see our role in the community as more than just providing a service. We want to make a positive impact through community partnerships, environmental stewardship, economic development, and education.



Community Partnerships

New Community Energy Production Plant

When Akron Energy Systems assumed operations of the City of Akron's community energy system in 2010, it was determined that a plan to ensure viability was needed.

In collaboration with leaders from the city, Akron Children's Hospital, and Cleveland Clinic Akron General, Akron Energy Systems embarked on a process to create a community energy system for the future.

The \$24.5 million project was financed by the City of Akron but will pay for itself through the plant's revenue, as well as operational efficiencies the project will bring.

Environmental Stewardship

Akron Energy Systems is a responsible community partner committed to environmental stewardship and energy innovation.

Water Recycling

Akron Energy Systems' customers use the steam we deliver to them for heating. When the steam has been used condensation takes place and steam condenses back into tiny droplets of water. Those drops of water are called condensation.

To recover the water from the customer, Akron Energy Systems instituted a condensate return process. This allows for water to be returned to the district energy production plant through underground piping that runs parallel to our steam and chilled water lines. Once returned to the plant, the water is treated and then reused to produce steam.

Since the new plant came online in January 2021, Akron Energy Systems has recycled more than 10-million gallons of condensate from one customer alone.

Economic Development

Community Energy System Fuels Financial Gains

Energy waste can add up to big losses for a business. The sources of that waste range from inefficient equipment and building controls to improperly designed lighting systems. Akron Energy Systems offers energy audits and planning to our system customers. By implementing cost-savings measures, customers can improve work conditions for employees and/or building tenants and increase revenue.

For example, Bounce Innovation Hub, located in Canal Place in downtown Akron, initiated a comprehensive facility assessment to identify inefficiencies and sources of energy waste.

Working with Akron Energy Systems, the organization has reduced their heating and cooling consumption, installed new building controls, transitioned to LED lighting and motion sensitive light switches, and developed a preventative maintenance program for all mechanical systems. As a result, Bounce has reduced its facility operating expense by \$600,000 in just one year.

Education

Engineering a Workforce for Tomorrow

Community energy is a specialized process that requires highly trained engineers, operators, and maintenance personnel.

To ensure that Akron Energy Systems is prepared for the future, we designed a cooperative learning program with local universities. Students who have completed two years of engineering studies are qualified to take part in a paid internship at Akron Energy Systems where they receive relevant work experience.

These opportunities provide students with the kinds of real-world challenges that will develop their technical skills and expand their professional experience. And by being part of a team that is deeply committed to the community and environmental stewardship, students connect with dedicated professionals who can help them reach their professional goals.



Boilers produce 450,000 pounds of steam per hour to provide heat

30-million gallons of water is recycled per year

Energy use reduced by 45%



Carbon footprint reduced by more than 100,000 tons per year



A Measurement Of Our Success

Utility Efficiency

4% increase in gas efficiency

23% increase in electric efficiency **Carbon Reduction**

3,800+ metric tons Water Recycling

33+ million gallons Energy Recycling

56,000+ Btu Direct Savings to Customers

\$350,000 in water

\$213,000 in thermal energy

Community Support

Akron Energy Systems believes that by giving back we can be a catalyst for a healthier, happier, and prosperous community.

This past year we took part in helping to nourish and educate, salute and support, and entertain and empower by collaborating with our partners in the public and private sectors.

- AES "Cool Zone" Misting Stations
- Akron Marathon
- Soap Box Derby
- Akron Fire Department
 - Memorial Stair Climb Event
- Art Museum Family Day Events
- Akron Public Schools STEM Night at Akron RubberDucks game
- Elves & More Northeast Ohio Charity bike giveaway
- House of the Lord Family Day
- Food & Gift Collection
- St Bernard's Food Pantry
- Joy Park Community Center

Together, we can harness the power of community.















222 Opportunity Parkway, Akron, OH 44307 330.374.0600 | AkronEnergySystems.com