Sustainability Decision Making in Practice: Rochester City Hall

How One Community Planned and Executed Against Climate Goals

ROCHESTER CITY HALL & SUSTAINABILITY PLANNING

Rochester City Hall stands at the heart of civic life — a historic landmark originally built between 1885 and 1889 as a federal courthouse and post office, now serving as the headquarters for city government. Housed inside its walls are administrative offices, public service departments, and the City Council chambers, connecting citizens to local government and fostering an environment for decision-making every day.

In recent years, Rochester has made sustainability a cornerstone of planning its future. Leaders recognized that the city's buildings — responsible for about 80% of community-wide emissions — are the key to achieving their sustainability goals and prioritized them accordingly. Rochester adopted its first greenhouse gas reduction goals in 2017, committing to cut emissions 50% by 2030 and reach net-zero by 2050. The plan aligns with Rochester Public Utilities' 100% renewable energy target and follows Minnesota's B3 energy benchmarking standards to ensure transparency and progress.

The city's sustainability framework drives measurable outcomes: 1.5% annual energy savings, a 25% renewable energy benchmark (already met), and an ongoing focus on electrification and efficiency. These priorities have made Rochester a state leader in practical, data-driven sustainability, proving that preservation and progress can work hand in hand.

DECOMMISSIONING THE DISTRICT ENERGY SYSTEM

In 2023 Rochester faced a pressing challenge: their steam district energy system had reached the end of its useful life. Leaks, inefficiency, and safety concerns made it too costly to repair. “It was a bit of a burning platform,” said Sustainability Lead Scot Ramsey, describing the need for urgent change.

When Olmsted County announced plans to terminate steam service by 2024, the city accelerated its timeline for finding a new solution that balanced historical preservation, energy reliability, and sustainability.

Rather than simply replace the system with a conventional boiler-chiller setup, Rochester saw an opportunity to model the city’s future with a more modern design — one built on geothermal energy and carbon-free heating and cooling that reflected its sustainability values.

ALIGNING STAKEHOLDERS ON GEOTHERMAL

The path to geothermal began with feasibility studies, data modeling, and council workshops. Multiple options were considered — from partial retrofits to full conversion. When the data came in, the City Council made a bold decision: transition all municipal facilities to geothermal, beginning with City Hall.

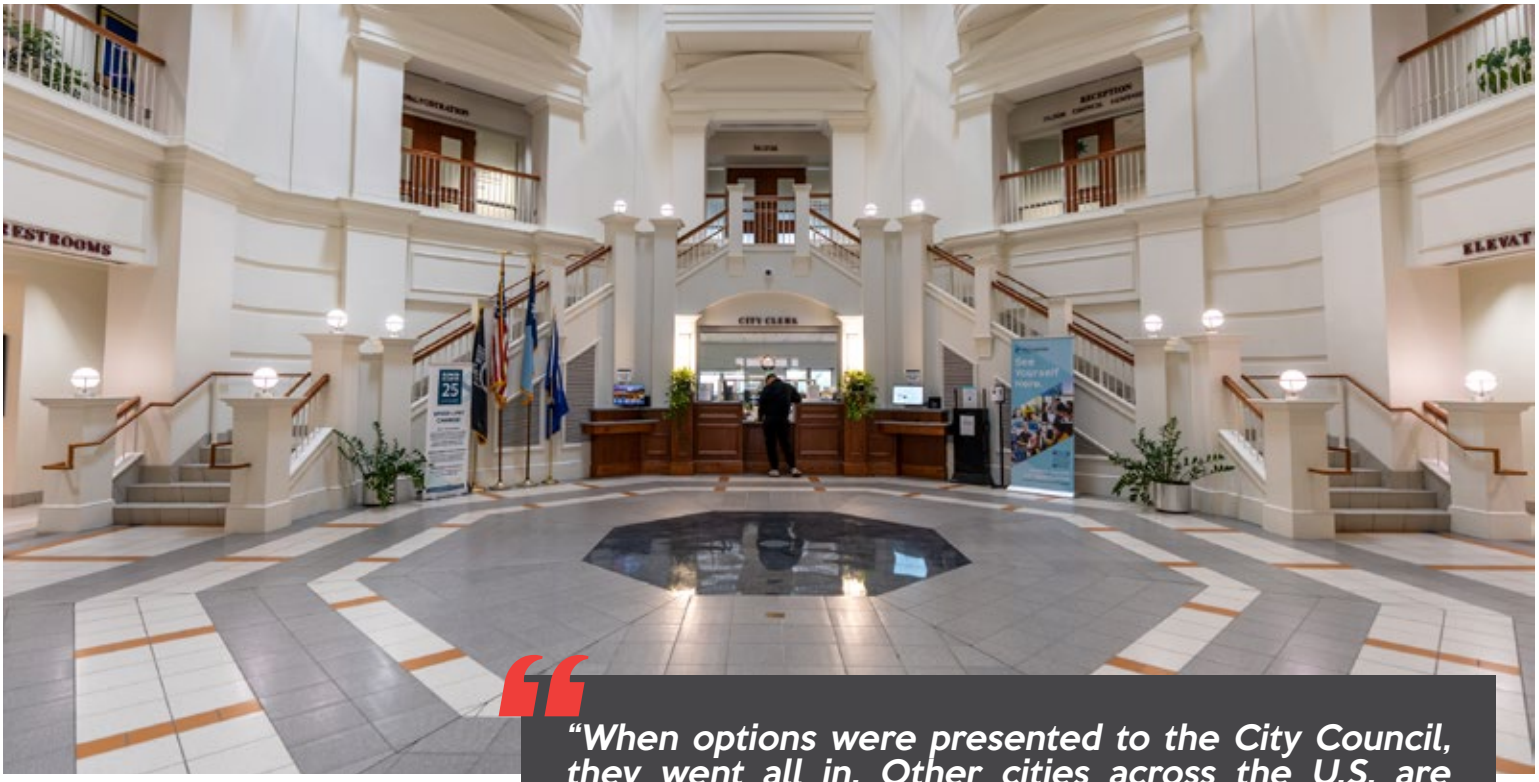
Support from the Destination Medical Center (DMC) — including over $2 million in funding — helped launch the effort. Additional momentum came from Inflation Reduction Act incentives and strong community support for renewable energy.

City Hall’s system leveraged Darcy Solutions’ aquifer-based geothermal system, chosen for its compact footprint and Minnesota-made innovation. The team discovered that the building’s mechanical systems were robust enough to operate efficiently at lower water temperatures (130°F rather than 180°F), minimizing retrofit costs while improving performance.

2
WELL SYSTEM

1,920
MBH HEATING DEMAND

156
TONS COOLING DEMAND



> *"When options were presented to the City Council, they went all in. Other cities across the U.S. are already reaching out to learn from Rochester."*
> *— Lauren Jensen, DMC Energy and Sustainability Manager*

CONSTRUCTION TIMELINE & PROJECT COMPLETION

Construction of the project's two-phase approach began in June 2022 and is set to finish in December 2025. The process proved less disruptive than expected, maintaining building operations throughout.

Once complete, the city expects a 65% reduction in energy use (BTUs per square foot) and significantly lower maintenance costs — a tangible payoff for investing in long-term sustainability.

LESSONS LEARNED TO SHARE WITH OTHER CITIES

Rochester's experience offers a roadmap for other communities:

- **Link infrastructure to climate goals** — tie every project to measurable emissions outcomes.
- **Engage stakeholders early** — transparency and communication build trust in new technology.
- **Leverage local expertise** — working with Minnesota-based Darcy Solutions kept innovation and investment local.
- **Design for lifecycle savings** — sustainable systems reduce costs and carbon over time.

- **Document and share results** — lessons in water treatment and permitting will streamline future geothermal projects.

EXPANDING TO THERMAL ENERGY NETWORKS

Rochester's next step is to expand City Hall's success into a citywide thermal energy network, linking public and private buildings through shared geothermal capacity.

"The goal is to build an interconnected system that lets us share and scale capacity," explained Ramsey. Nearby lots and civic buildings could become future nodes in this network — extending efficiency, reliability, and resiliency across downtown.

This vision aligns with Rochester's sustainability framework: electrify buildings, reduce greenhouse gases, and create adaptable, future-ready systems. City Hall's geothermal installation is just the start of a networked energy future for the community.

CONCLUSION

Rochester City Hall's geothermal conversion demonstrates how historic preservation and modern sustainability can coexist. By retiring a failing district energy system and replacing it with clean, geothermal technology, the city set a powerful precedent for municipal decarbonization.

As Rochester moves toward its 2030 and 2050 climate goals, City Hall stands as both a landmark of heritage and a blueprint for the future — showing that visionary planning, community alignment, and innovation can make sustainable infrastructure a reality.

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