



# CITY OF MENOMONIE

## HVAC ENERGY EFFICIENCY PROJECT

HVAC upgrades at City Hall work to increase energy efficiency and make progress towards 2050 Carbon Free Energy Goal



### FINANCIAL SNAPSHOT

**Total Project Cost**

\$221,495.00

**EIGP Grant Award**

\$141,025.00

**City Cash Contribution**

\$80,470.00

**Estimated Rebate Amount**

\$2,250

**Estimated Annual Energy Savings**

20,396 kWh (7% reduction)

2,433 therms (10% reduction)

**Estimated Annual Cost Savings**

\$4,765.00



Upgrading City Hall's energy efficiency saves money and drives us closer to our 2050 carbon-free energy goal. The City is dedicated to boosting energy efficiency across all our equipment and buildings.

**Mayor Randy Knaack**

City of Menomonie

The City of Menomonie purchased the City Hall Building at 800 Wilson Ave from Dunn County in January 2020. The City was previously a tenant in the building, which was built in 1959.

### OBJECTIVES

The City was looking to upgrade outdated HVAC equipment to reduce energy use, save money and provide a comfortable environment for staff, tenants and customers.

### CONNECT WITH EXPERTS

The City connected with local Xcel Energy & Focus on Energy staff to conduct an energy assessment at City Hall to identify and prioritize energy efficiency projects.

### PROJECT SCOPE

The City has previously worked through two phases of upgrades to the City Hall HVAC system. This project, Phase III, looked to upgrade and integrate new HVAC equipment controllers and allow for remote operation of the system. The following items were updated during the project:

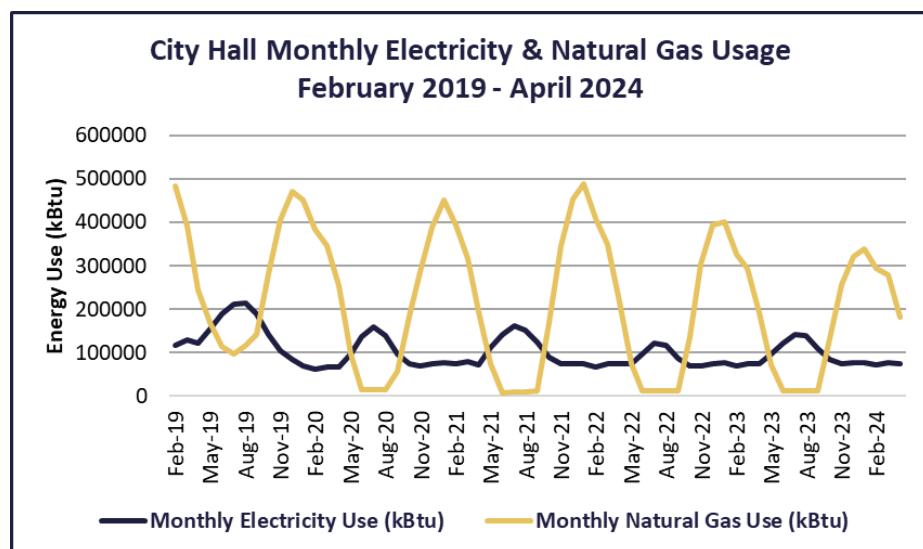
- Installed variable frequency drives and economizers in two air handling units.
- Installed new controllers, sensors and variable frequency drives in the hot water system.
- Installed a new temperature controller and sensors in five of the building zone controllers that serve the hot water coils.
- Installed new temperature controllers and sensors on 58 fan coil units.
- Installed new temperature controllers and sensors on three radiant ceiling panels.

# GRANT FUNDING

City staff wanted to utilize City Hall budgeted funds as efficiently as possible, so they began searching out grant opportunities to stretch the project budget and scope. Staff found and applied for the Public Service Commission Energy Innovation Program grant in 2022. This project was just below the funding line during that grant cycle. Staff updated the application and re-applied for the 2023 Energy Innovation grant program cycle. The project was then selected for a grant of \$141,025.00 to update the City Hall HVAC system. This allowed the City to complete this project in one year as opposed to likely four or five years with City funds only.

## CITY HALL ENERGY USE

Below is a graph of the monthly electricity and natural gas usage at City Hall from February 2019 - April 2024. At the time of this publication, the most recent energy data available was from April 2024. This project concluded in May 2024. The graph will be updated as new data is received to show energy savings from this project.



## PART OF A BIGGER PLAN

The City of Menomonie is spotlighting our City Hall HVAC energy efficiency project to encourage other businesses and residents to get involved with the community's energy conservation efforts. These efforts are outlined in the City's Energy Action Plan.

## NEXT STEPS

With additional goals in place, the City of Menomonie continues to look for new ways to save energy and money. The City will continue to upgrade to more efficient equipment and use lessons learned from previous improvement projects to identify what to do next.

## ENERGY ACTION PLAN

- City Council approved Menomonie's Energy Action Plan in 2021
- The plan was developed through a community stakeholder process.
- More information can be found here: [www.menomonie-wi.gov/energy](http://www.menomonie-wi.gov/energy).

### Energy Action Plan Goals

- Ensure all electricity consumed by municipal buildings is **100% carbon-free by 2050**
- The City of Menomonie will reduce carbon emissions from municipal buildings **25% by 2030** and **60% by 2040**.
- Menomonie-area residents, businesses and education institutions will increase energy savings **30% by 2030**.
- Menomonie will double the number of renewable energy participants by 2030, increasing the total amount of renewable electricity in our community to **1.3 million kWh**



Acknowledgement: "This material is based upon work supported by the Public Service Commission of Wisconsin, Office of Energy Innovation and the Department of Energy, Office of Energy Efficiency and Renewable Energy (EERE), under the State Energy Program Award Number DE-EE0000163." Disclaimer: "This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof."