

Municipal Building

215 Martin Luther King Jr Blvd

Madison Building ID: M10464

ESPM ID: 2788273

Reporting Period: 2024 Calendar Year

Property Type: Office

Gross Floor Area: 82,952ft²

Year Built: 1920



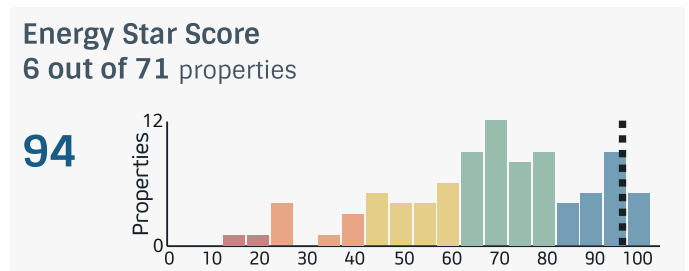
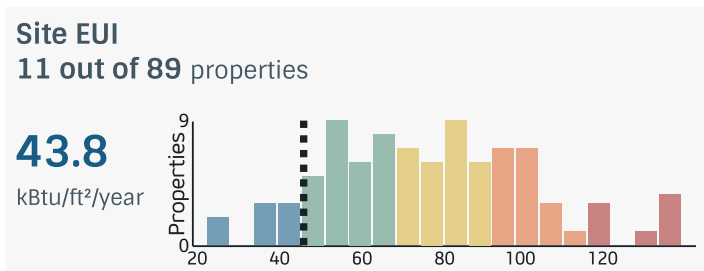
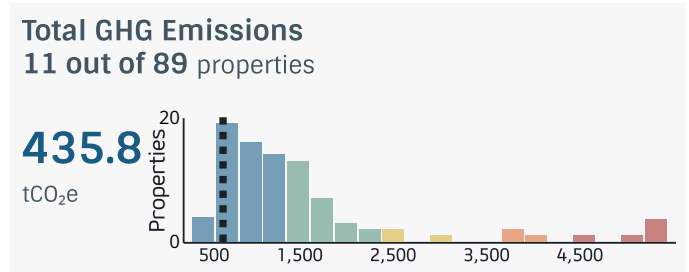
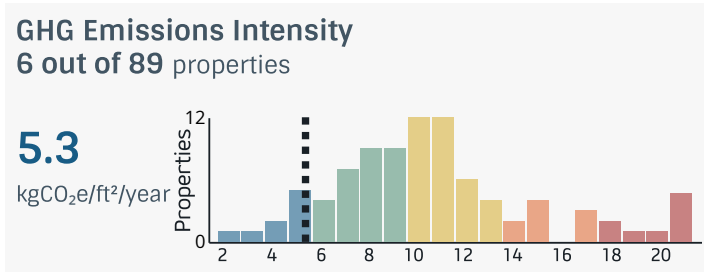
Your Highlights

- 89** Number of properties of the same type as yours
- 6 / 89** Your greenhouse gas intensity (GHGI) rank among properties of the same type (where 1st is the lowest emitter)
- 87 / 324** Your GHGI rank compared to all buildings in the whole City of Madison dataset
- 94** Your property's ENERGY STAR score

Performance This Year

The charts below compare your building's current performance (dashed black line) with buildings of the same property type. The height of each bar shows the number of properties with each performance score.

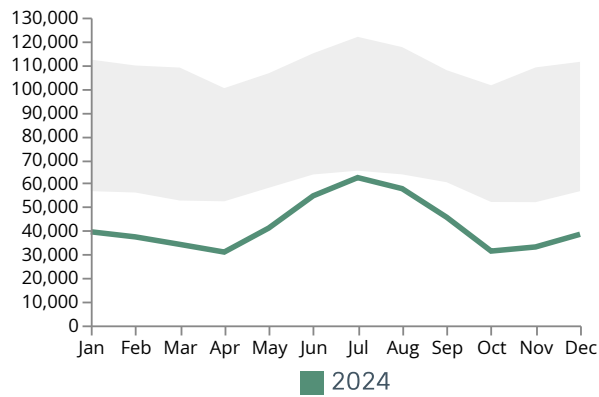
As the program expands, additional buildings of the same type will become available for comparison. For now, if fewer than five buildings of your property type are available, this graph will not be displayed.



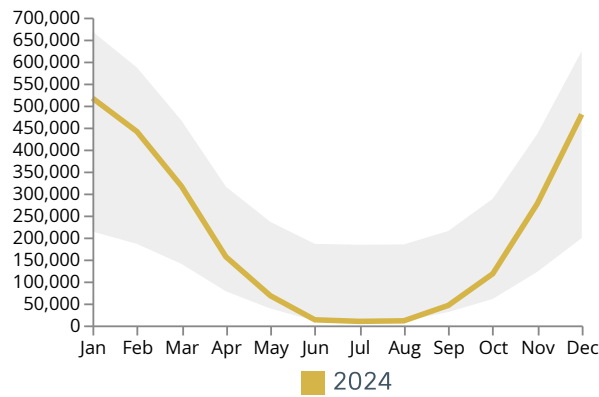
Monthly Performance

A comparison of your building's monthly energy performance, by energy type, year-over-year. When a significant correlation between energy consumption and weather was detected, the data was "weather-normalized" with the 30-year average weather. Otherwise, your billed data is presented.

Electricity Usage (kWh, Weather Normalized)



Thermal Energy Usage (kBtu, Weather Normalized)



The grey band represents the average typical performance for a building similar to yours (same property type and size).

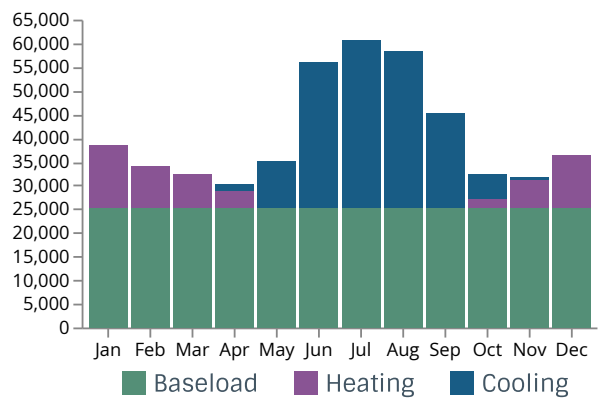
Note: "thermal energy usage" combines natural gas, renewable natural gas, district hot water, district steam, propane, fuel oil, and biomass. District chilled water is not yet accounted for.

Energy Load Breakdown

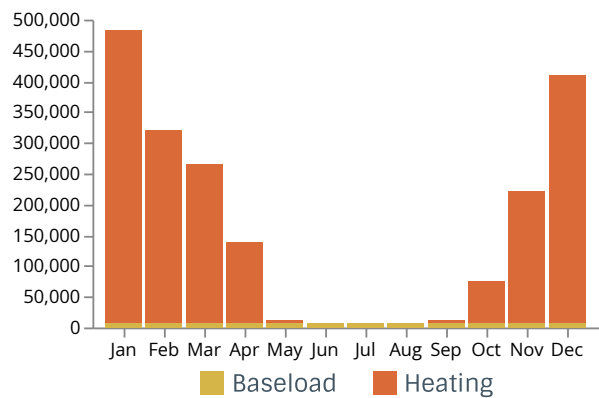
A modeled breakdown of your building's energy consumption into its main components: heating load, cooling load, and baseload.

When there is a correlation between energy consumption and weather, the approximate load breakdown for the current year is presented. Otherwise, the billed data is shown, and the entire load is assumed to be "baseload."

Electricity Breakdown (kWh, Approximate)



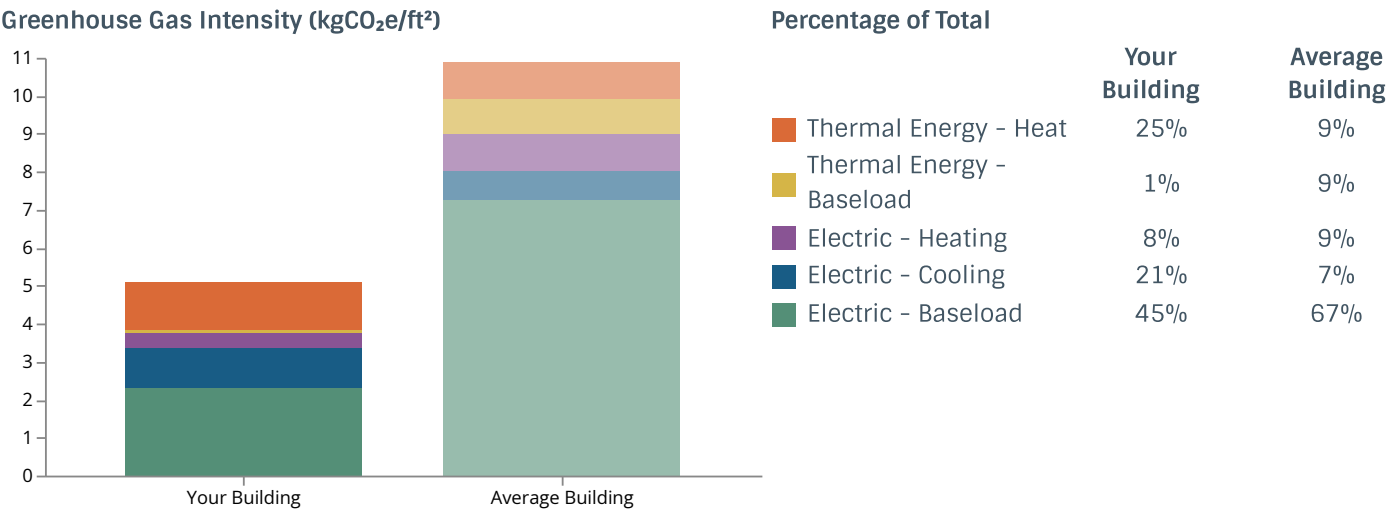
Thermal Energy Usage Breakdown (kBtu, Approximate)



Greenhouse Gas Intensity Breakdown by End-Use

Greenhouse gases (GHGs) are the leading cause of climate change. The graph below shows which end-use(s) are the main sources of GHG emissions at your property. It also compares your building's GHGI to the average building's GHGI (for the same property type).

Reducing emissions can involve saving energy through operational changes, upgrading to more efficient equipment, improving air sealing and insulation, transitioning from fossil-fuel-powered equipment to high-efficiency electric models, and using renewable energy sources like solar or wind. Electrification is increasingly a good decision, but it is important to continue to run the numbers on GHG savings. Begin by addressing the end-uses that contribute the most to emissions.



How Can You Improve?

This section contains insights and recommendations based on comparing each of your building's energy end-uses (heating, cooling, baseload) to other buildings of the same property type in Madison.

Below each bar, you'll find the potential carbon and dollar savings associated with improving your building's energy performance. If your building's energy use improves to rank within the top 25% of similar buildings in Madison (the "75th percentile"), these are the savings you could achieve. If your building is already performing better than the 75th percentile, the savings shown represent what you could gain by reducing energy consumption for this end-use by an additional 10%.

Energy costs are approximated and based on average blended rates resulting in \$0.0939/kWh for electricity and \$0.5910/therm for thermal energy.

Note: "thermal energy usage" combines natural gas, renewable natural gas, district hot water, district steam, propane, fuel oil, and biomass. District chilled water is not yet accounted for.

Heating Energy

Low PerformanceAverageHigh Performance

If you achieved the high performance group (top 25%), you would:

Reduce: **71 tCO₂e/yr**

Save: **\$8,198/yr**

Where to look: The heating load typically consists of heat loss through the building envelope (windows, walls, roofs) and heating energy for ventilation. Consider envelope upgrades, higher efficiency heating equipment, heat recovery ventilation systems, minimizing simultaneous heating and cooling, and optimizing operation setpoints. To reduce GHG emissions, consider switching to HVAC systems that use high-efficiency electric equipment rather than natural gas (always calculate the GHG savings first).

Electric Baseload

Low PerformanceAverageHigh Performance

You're already a top performer. With 10% more improvement, you would:

Reduce: **19 tCO₂e/yr**

Save: **\$2,834/yr**

Where to look: The electric baseload typically consists of lighting loads, plug loads (computers, servers), and equipment loads (elevators, machinery). Consider lighting improvements and plug load management tactics.

Thermal Energy Baseload



You're already a top performer. With 10% more improvement, you would:

Reduce: Less Than 1 tCO₂e/yr

Save: \$54/yr

Where to look: The thermal energy baseload typically consists of domestic hot water heating (boiler), gas-consuming process loads (e.g., cooking/kitchens), and potentially summer ventilation "reheat." *Consider higher efficiency water heating equipment, fuel-switching to electric equipment, and if applicable, minimizing simultaneous heating and cooling of ventilation air.*

Electric Cooling



If you achieved the high performance group (top 25%), you would:

Reduce: 51 tCO₂e/yr

Save: \$7,586/yr

Where to look: The electric cooling load typically consists of equipment loads from chillers and/or air conditioning units. *Consider upgrading to higher-performance equipment and reducing heat gain through the building envelope.*

Now What?

- Visit the [Building Energy Savings Program](#) website for the latest information and resources.
- Visit the [Focus on Energy](#) website for information on available technical assistance and financial incentives to improve the performance of your building, including:
 - Free energy efficiency consultation and analysis
 - [Rebates for energy-efficient products and equipment](#)
 - [Building energy optimization including tune-ups and retrocommissioning](#)
- Connect with a Focus on Energy Advisor, who can help you get started:
 - Adam Wagner, Commercial Advisor – adam.wagner@focusonenergy.com
 - Joe Kottwitz, School & Government Advisor – joe.kottwitz@focusonenergy.com
- Reach out to the City of Madison Sustainability and Resilience team for questions and technical support:
 - Jessica Price, Sustainability and Resilience Manager – jprice2@cityofmadison.com
 - Gregg May, Sustainability Program Coordinator – gmay@cityofmadison.com
 - Alice Duncan-Graves, Bloomberg Harvard City Hall Fellow – aduncan-graves@cityofmadison.com

Glossary

CO₂ equivalents (CO₂e): Greenhouse gases consists of many different gases. In order to have a common unit of measure, all constituent gases are converted into carbon dioxide equivalents, CO₂e. This is referred to as "carbon" or "carbon emissions" in business sustainability circles.

ENERGY STAR Score: The 1–100 score calculated by ENERGY STAR Portfolio Manager® that measures how well the property is performing relative to similar properties, when normalized for climate and operational characteristics. 1 represents the worst performing buildings and 100 represents the best performing buildings. [Learn More.](#)

End-Use: An end-use is a categorization of where energy (or greenhouse gases) is being consumed or used in a building.

Fuel-Switching: Refers to changing a building's thermal energy to electrical energy. For example, instead of heating with natural gas or district hot water, using electricity.

GHGI: Greenhouse gas intensity in kilograms of CO₂ equivalents per square foot of gross floor area (kgCO₂e/ft²).

GHG: Greenhouse gas emissions, in tonnes of CO₂ equivalents.

Greenhouse Gas Emission Factors: GHG emission factors are multipliers used to calculate how much carbon dioxide equivalents (CO₂e) are emitted for each energy type. The following factors were used for this program, as per [ENERGY STAR Portfolio Manager](#).

Gross Floor Area: The building's gross floor area as reported in ENERGY STAR Portfolio Manager or as provided by the owner.

Percentile: A ranking within a group. The higher the percentile, the better. A percentile ranking of 50 means "average", whereas a percentile ranking of 100 means "best".

Site EUI: The site energy use intensity (or Site EUI) is the measure of the total energy use at the property divided by the reported gross floor area.

Thermal Energy: Thermal energy consists of the combination of natural gas, renewable natural gas, district hot water, district steam, propane, fuel oil, and biomass.

Weather-normalization: Weather-normalization is the process of modelling (i.e., predicting) energy consumption based on historic performance and applying specific weather data (e.g., the 30-year average weather). It allows you to compare the performance of a building over time periods that had different weather.