

2022 Energy and Water Benchmarking Report

City of Reno

Energy and Water Efficiency Program



Introduction

In the face of changing climate, Reno is proud to be a leader in sustainability. The City of Reno has a commitment to reduce GHG emissions% by 2030 and is one of just 120 cities nationwide to be LEED for Cities certified through the US Green Buildings Council.

Through the process of collecting energy emissions and water use data from large buildings, we will deepen our understanding of how we perform and where we can create economic opportunities for a healthy, sustainable city.



Purpose

The Reno Energy and Water Efficiency Program requires commercial, institutional, and multifamily buildings above 30,000 square feet to report their water and energy use to the City. The threshold for municipal buildings is 10,000 square feet. This data will be collected and assessed annually to determine Reno's progress towards its longer-term sustainability targets. This process, known as benchmarking, will enable building owners to assess how their properties compare to similar buildings in the city and make informed decisions on how to increase efficiency. The benchmarking process will be a crucial part of meeting the City's goal to reduce GHG emissions by 40% from 2008 levels. The data reported during the benchmarking process will also be used as a baseline for buildings looking to decrease emissions in compliance with the upcoming building performance targets ordinance.

Definitions

- Energy Use Intensity (EUI): measures energy use per square foot in kBtu/ft². A lower EUI means energy use is lower at the site.
- Greenhouse Gas Emissions: chemicals that trap heat in the atmosphere and are released from burning fossil fuels to create energy.
- Intensity: refers to how efficiently energy and water are used.
- Site Energy: refers to the energy consumed by a specific property being reported for benchmarking (EnergyStar).
- Water Use Intensity (WUI): measures water use per square foot in gal/ft².

Energy and Water Efficiency Program 2022 Benchmarking Data

Metric	Number
Number of Properties Reported Data to Program	225 properties
Total Square Feet of Area Reported to Program	34,512,808 ft ²
Median Site Energy Use Intensity (EUI)	56.8 kBtu/ft ²
Total Greenhouse Gas (GHG) Emissions	1,065,780.4 tons of CO ₂
Average CO ₂ Emissions per Building	.032 tons/ft ²
Median Water Use Intensity (WUI)	28.3 gal/ft ²
Total Water Usage	5,439,768.9 kgal



Figure 1 Vintage at Sanctuary reported data to the Energy and Water Benchmarking Program for 2022. Photo from <https://www.vintageatsanctuary.com/photogallery>

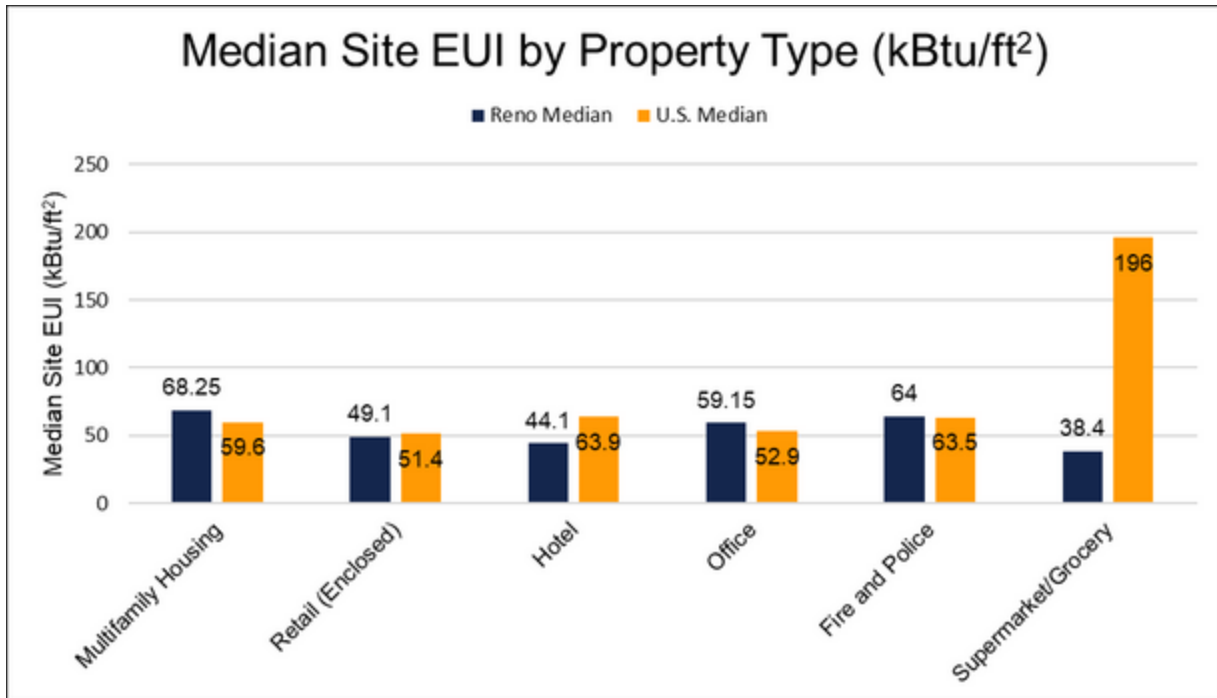


Figure 2 Comparative bar chart of Median Site EUI for Reno by property type compared to National Median EUI by property type. The property types shown in this graph demonstrate some of Reno's highest median EUI values.

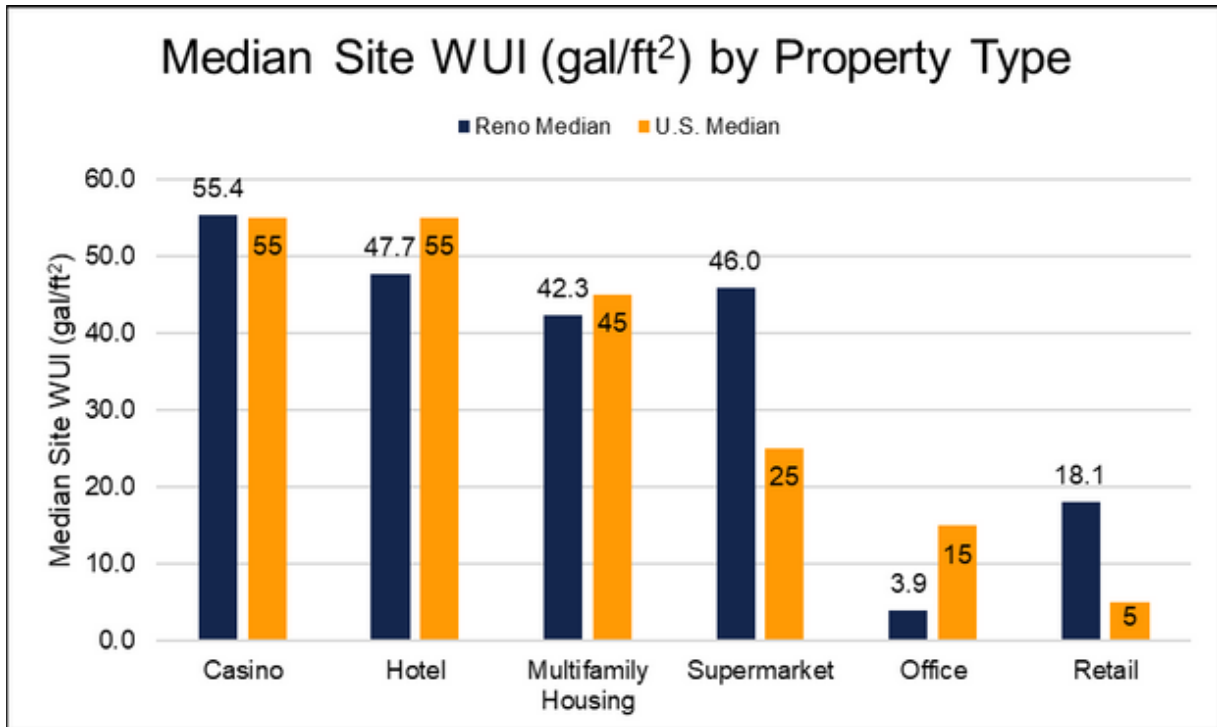


Figure 3 Bar chart depicting Average Site Water Use Intensity by property type for the City of Reno, compared to the US Median. These property types were selected as they represent some of the largest average WUI values for the city. Median values for the US were estimated using the [EPA's graph of Median Site WUI](#). Median US WUI for hotels was compared to Casino and Hotel WUI's in Reno.

A lower EUI represents better energy performance. For the City of Reno, our median EUI is **lower** than the national median for multifamily housing and supermarkets or grocery stores.

Conversely, the median EUI for Reno is higher than the national median EUI for retail and hotels. It is exceptionally higher for offices and fire and police, demonstrating a need to focus our efforts on reducing energy use in these spaces.

In the City of Reno, average WUI is highest for Casinos and lowest for Offices. Median WUI's for Hotels and Casinos in Reno were compared to the US median WUI for Hotels. Reno's Casino WUI is very similar to that of the national median, and Reno Hotel WUI is slightly less than the national median.

The median WUI for Multifamily Housing in Reno is also similar to that of the national median. Additionally, the median WUI for Offices in Reno falls below the national median, demonstrating high water efficiency in these spaces.

Lastly, the median WUI for Retail is higher in Reno than the national median. This highlights an area of improvement for Reno.

ENERGY STAR Scores

An ENERGY STAR Score measures how well a building is performing when it comes to energy consumption. It serves as a metric that allows operators to compare use to other buildings. A score of 50 represents median energy use (ENERGY STAR).

Highest ENERGY STAR Scores

1. Lakeridge East & West
2. Basecamp
3. Vizcaya Hilltop
4. The Village at Iron Blossom
5. Vale Apartments
6. 70 Damonte Pkwy - Kohl's
7. Vintage at the Crossings
8. Fifteen 51
9. Vintage at Sanctuary
10. Steamboat by Vintage

Lowest ENERGY STAR Scores

1. 1100 15th St.
2. 10345 Professional Circle
3. 5555 S. Virginia St.
4. 3rd Street Flats
5. 5370 Kietzke Ln.
6. 980 Sandhill Rd.
7. 5310 Kietzke Ln.
8. 887 Trademark Dr.
9. Pine Middle School
10. Meadowood Mall

To view the data file of properties that reported to the Benchmarking Program, please [view this link](#).



Moving Forward

New Energy Analysis Technology

As more buildings report to our benchmarking program, the City of Reno has switched to an innovative energy tracking software that allows for the swift and accurate collection and analysis of incoming building performance data. BEAM also allows stakeholders to play an active role in sharing their energy use data. [Check out BEAM!](#)

Upcoming Changes

Beginning in 2026, buildings may also have to **comply with performance targets**. Performance targets might include metrics such as Energy Star score or Energy Star water score of fifty or greater, decrease in site EUI or WUI of 10% or more from baseline years, or other similar metrics, to be evaluated by a qualified service company. Read more about targets, reporting schedules, pathways to compliance, and more in [Reno's Administrative Code](#).



Resources for Building Owners

When building owners and managers have up-to-date information on their building's performance, they can make more cost-effective investment decisions.

- Visit [Reno Resilience's website](#) for further information on the ordinance, compliance guides, trainings, how to report, and exemption requests
- Read about building energy policies and learn how to manage your portfolio on [the Center for Building Performance Standards](#)
- See [NREL's guide on how to maximize energy savings](#) and find funding opportunities for small businesses
- [Find financing for efficiency projects](#) through the US Office of Energy Efficiency
- [NV Energy Powershift](#) can help with business energy incentives, tips, and free energy assessments
- Become a Green Business by joining the [Nevada Green Business Network](#)
- [The Commercial Property Assessed Clean Energy \(C-PACE\) Program](#), launched by the City in 2019, provides financing for renewable energy and efficiency and resiliency projects

Building owners should speak to their tax professional about federal tax credits for energy efficiency projects, made available under the Inflation Reduction Act of 2022. These, along with local incentives, can decrease the cost of capital projects.

