



**SUSTAINABILITY
AND CLIMATE
ACTION PLAN
2023 ANNUAL REPORT**

RENO
RESILIENCE

SUMMARY

Reno Resilience is the City of Reno’s sustainability and climate program. It embodies our city leaders’ commitment to create a more sustainable and resilient community. The goal of the Sustainability Program is to establish well-focused initiatives that promise to strengthen Reno’s reputation as one of the world’s leading cities while also improving the day-to-day quality of life for all of the City’s residents. 2023 highlights include:

- Streamlined the energy benchmarking program to the BEAM platform
- Performed a lighting retrofit in 27 parks
- Completed Nevada’s first community solar project
- Won a grant for \$500,000 to plant trees
- Won a subaward for geothermal education

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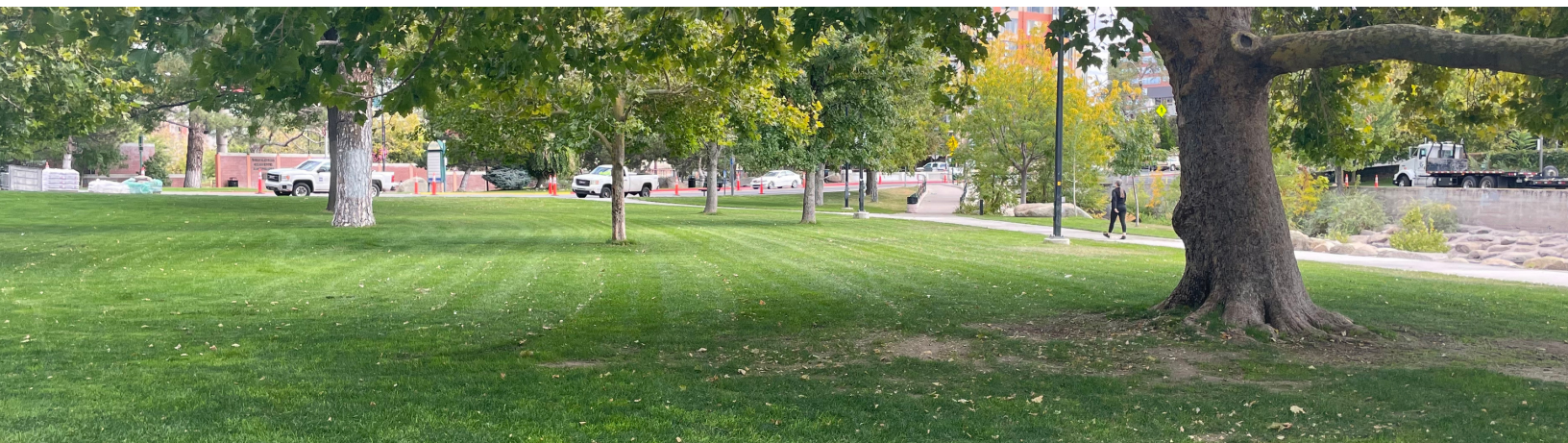
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COMMUNITY-WIDE GREENHOUSE GAS EMISSIONS

In partnership with ICLEI - Local Governments for Sustainability - the City of Reno updated its community-wide greenhouse gas (GHG) emissions inventory. The inventory includes data through 2021.

EMISSIONS AT A GLANCE

- 1** Transportation
37%
- 2** Residential Energy
31%
- 3** Commercial Energy
26%

- Transportation & Mobile Sources (37%)
- Residential Energy (31%)
- Commercial Energy (26%)
- Solid Waste (2%)
- Water & Wastewater (2%)
- Process & Fugitive Emissions (1%)

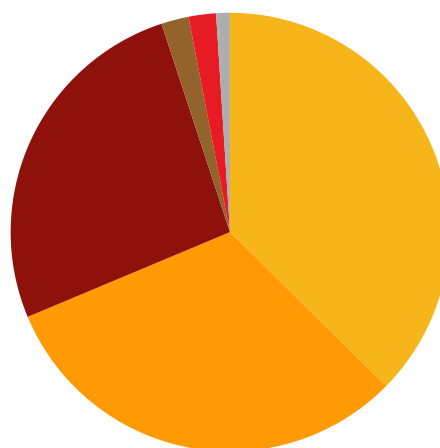


Figure 1: Community-Wide Emissions by Sector

Greenhouse gas (GHG) emissions increased and decreased in a variety of aspects of each sector. All emissions in the residential sector, excluding those from electricity, were reduced. The same applies for the commercial sector. Among the transportation sector, some GHG emissions increased as a result of greater transit use. The most significant of these emissions, however, resulted from growth in diesel on-road travel. Solid waste only saw a slight increase in emissions from landfilled waste, mirroring the minor growth in Reno's population across the past 7 years. Among water & wastewater, all GHG emissions increased. The process & fugitive emissions sector also experienced growth reflective of the emissions increase of natural gas in the residential and commercial sector.

CLEAN ENERGY PROFILE

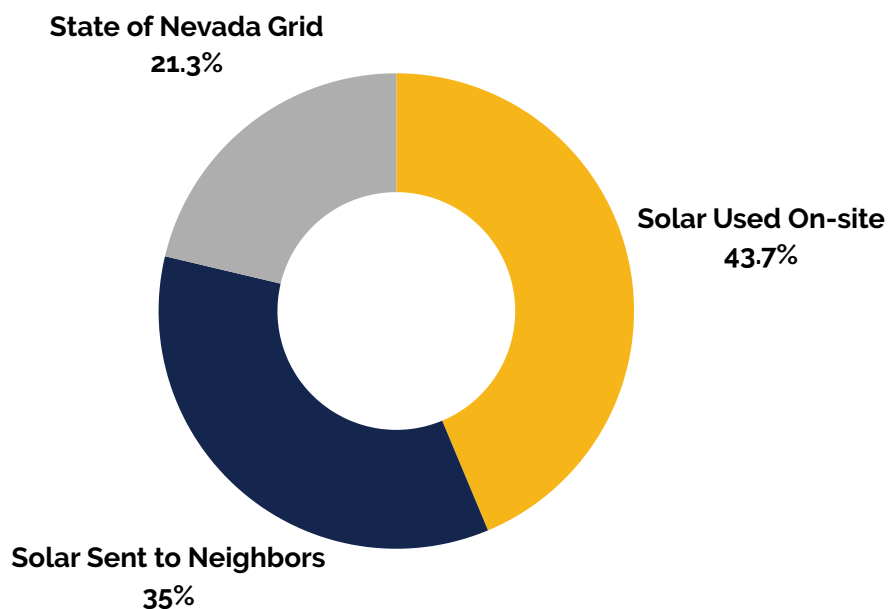
The City of Reno generates carbon-free electricity on-site. This helps reduce emissions related to energy purchased from the grid. Some of the City's electrical load is off-site and covered 100% by renewable energy. We partner with Switch data centers to house most of our server infrastructure, and a cumulative of 339 MWh of generation was credited to the City under the effort.

Emissions Avoided in 2023 (lbs co2e): **723,276.74**

Properties with On-Site Carbon-Free Generation: **10**

Total Renewable Energy Generated (MWh): **1,279.93**

Example of On-Site Carbon-Free Generation (community center)



SUSTAINABILITY PROJECT HIGHLIGHTS

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ENERGY AND WATER EFFICIENCY BENCHMARKING PROGRAM

Substantial changes took place to the Energy and Water Efficiency (“Benchmarking”) program. The City introduced the Building Energy Analysis Manager (BEAM) platform to manage and analyze incoming energy and water data. This software streamlined building compliance with the ordinance (RAC Chp. 14.30). Additionally, data will now be collected through a “share” feature in ENERGY STAR Portfolio Manager (ESPM). This makes it easier for building owners to remain compliant, because fewer changes and steps are needed. Due to these changes, 30% more buildings reported this year than in 2022 (for the 2021 tracking year).

225

Properties Reported
Data to Benchmark
Program



34,512,808

Total Square Feet of
Area Reported to
Benchmark Program



BEAM



PARKS LIGHTING UPGRADE

After a detailed energy audit, the City of Reno upgraded **27 parks to LEDs** through an Energy Performance Contract.

The upgrades include restrooms, parking lots, pavilions, and accessway lighting. Project benefits:

- Est. 146,263 Annual kWh electricity savings
- Est. \$1,437 annual O&M savings
- Est. \$11,013 annual utility savings



COMMUNITY-BASED SOLAR RESOURCE



The City of Reno was selected as a host site under NV Energy's Expanded Solar Access Program.

The City leases the land to NV Energy. The project is Nevada's **first** community solar array.

Eligible households and businesses subscribe to the clean generation (capacity) through NV Energy and receive a credit on their bill. Based on the annual anticipated generation, this equated to about \$7,000 per year in cumulative savings to subscribers.



GEOTHERMAL EDUCATION SUBAWARD

Envirolution provided the City with a subaward for \$5,000 from a grant awarded by the U.S. EPA. Envirolution distributed these funds to five sub-recipients to carry out Project ReCharge, a hands-on educational program to prepare teachers and students to become sustainability leaders. The City of Reno is using the funds to hire a student intern to assist with managing geothermal educational lessons, some of which may be featured at the new Moana Springs Aquatic Center.



USDA FOREST SERVICE \$500K GRANT



In November, the USDA Forest Service awarded the City of Reno \$500,000 to grow and plant trees near neighborhoods adjacent to the Reno-Tahoe International Airport. This area consists of disadvantaged communities with a high energy burden and a high urban heat index. The goal of this project is to mitigate the urban heat island (UHI) effect, increase tree biodiversity and canopy, and create a buffer from particulate matter.

USEFUL LINKS

The following websites or plans are referenced in this report and provide additional context and information.

- [Operational Emissions Dashboard](#)
- [Energy and Water Efficiency Benchmarking Ordinance](#)
- [Sustainability and Climate Action Plan](#)
- [Community-Based Solar Host Sites - NV Energy](#)

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