



Washoe County Sustainability

December 12, 2023 update

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State and County Mandates



State Mandate

Nevada's Greenhouse Gas (GHG) reduction goals (NRS 445B.380):

- 28% below 2005 levels by 2025
- 45% below 2005 levels by 2030
- Net-zero or near by 2050

Washoe County Mission

Washoe County FY24 Strategic Priorities

Goal 2: Support a Thriving Community

NET ZERO: Plan interim steps to Net Zero by 2050

- County Operations
- Community-wide

Working together regionally to provide and sustain a safe, secure and healthy community.

Green Recovery Plan

- Reduce Greenhouse Gas Emissions
- Enhance Resilience & Mitigate Climate Change Impacts
- Strengthen Food Security & Increase Access to Healthy Foods
- Invest in Equitable, Multimodal Transportation Infrastructure
- Establish an Urban Forestry Program

Why is Sustainability Important?



Measurable Outcomes

- Reduced GHG emissions = cleaner air
- Healthier people = lower healthcare and EMS costs
- Lower energy costs = more money in people's pockets
- More jobs and a stronger economy
- Quality of Life

Equity

Priority: to benefit communities that have been historically marginalized and overburdened by pollution, underinvestment in clean energy infrastructure, and lack of access to energy-efficient housing and transportation.

What are Greenhouse Gases?



Gases that trap heat in the atmosphere

Mt CO₂e - Metric tonnes (2,204.6 lbs) carbon dioxide equivalents

- Carbon dioxide (CO₂): 1 Global Warming Potential (GWP)
 - Methane (CH₄): GWP = 25x over 100 years
 - Nitrous oxide (N₂O): GWP = 273x over 100 years
 - Chlorofluorocarbons (CFCs)
 - Hydrofluorocarbons (HFCs)
 - Perfluorocarbons (PFCs)
 - Sulfur hexafluoride (SF₆): GWP = 23,500x over 100 years
- GWP up to 10,000x over 100 years

What Emissions Do We Measure?

There are three Scopes of emissions identified by the Greenhouse Gas (GHG) Protocol. Scope 3 emissions are *indirect emissions* from sources that the organization does not own or control.

Scope 1



Direct Emissions

- Stationary Combustion (Natural gas)
- Mobile Combustion (Vehicle fleet)
- Fugitive Emissions (Refrigeration/AC)
- Process/Manufacturing

Scope 2



Indirect Emissions

- Purchased electricity, heat, steam or cooling

Scope 3



Indirect Emissions

- Travel
- Commuting
- Leased assets
- Purchased goods
- Waste
- Others

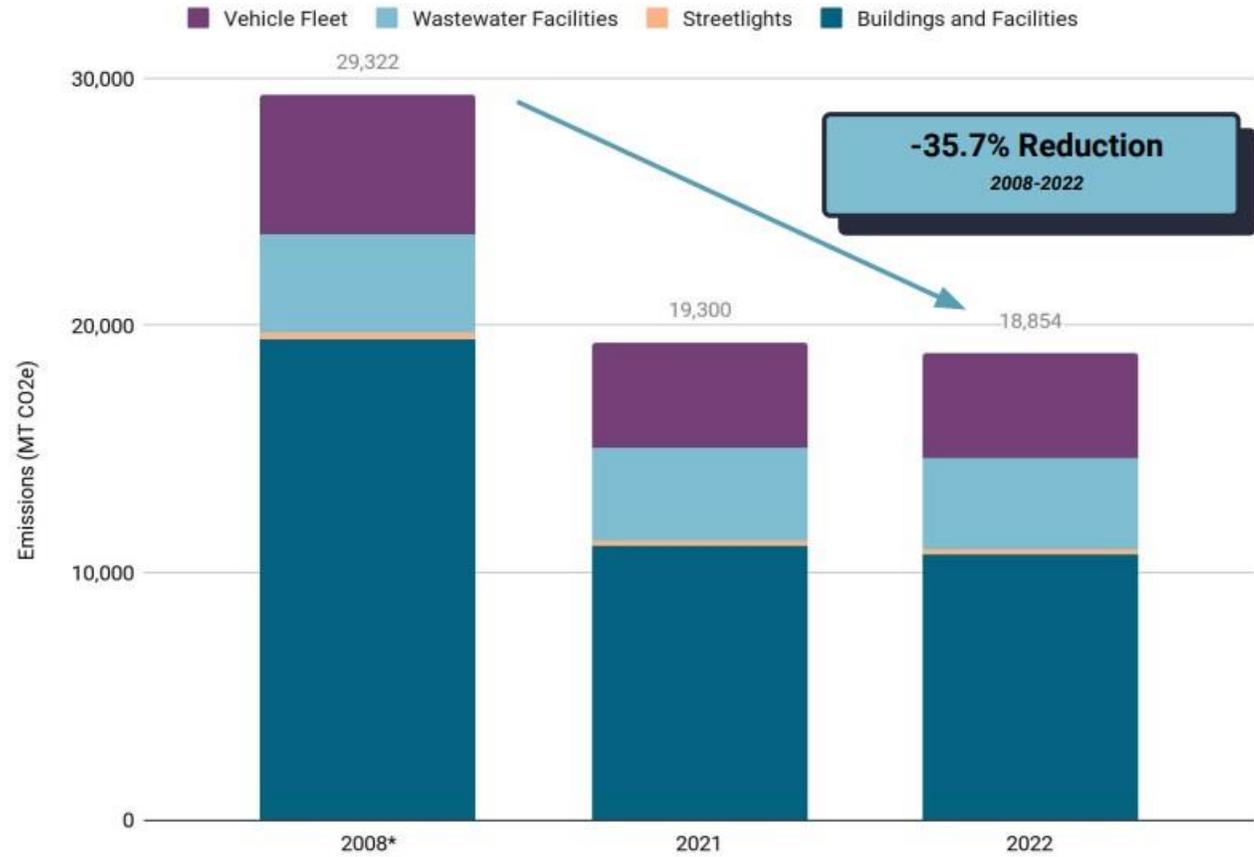
County Operations GHG Emissions



County Facilities Reductions



Yearly Trends, Emission Source Breakdown



Why?

- Greener Grid*

	2008	2022
Fossil Fuels	91%	63%
Renewable Energy	9%	37%

- Stronger Vehicle Emissions Standards
- More efficient equipment
- Staff dedication to improvements

*<https://www.eia.gov/state/data.php?sid=NV>

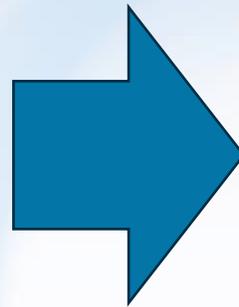
-35.7% reduction since 2008. Target achieved!

County Ops reductions will baseline from 2021



2008 GHG Inventory

Assumptions and generalities



2021 GHG Inventory

- Better data
 - a more accurate picture of operations
- Better science
 - Uniform & consistent metrics – apples to apples
 - **Science Based Targets initiative (SBTi)** Aligned with global reduction targets – limiting global warming to 1.5°C above pre-industrial levels.

Emissions Baseline: 2021

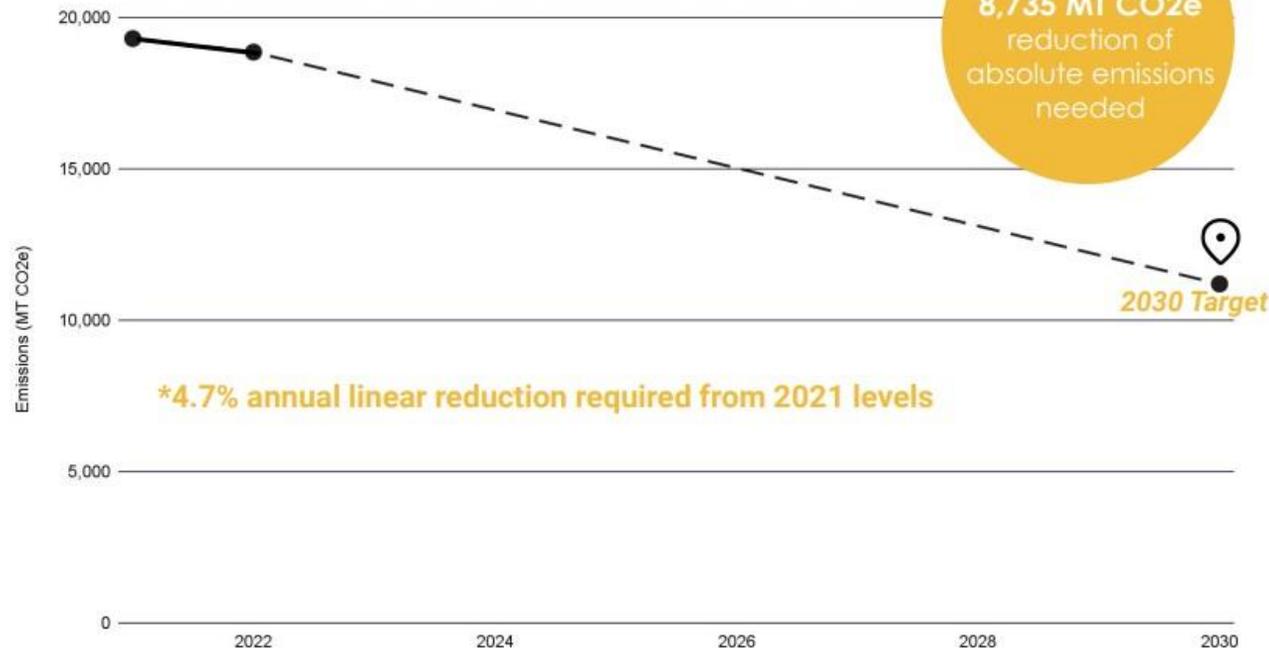


Aligning with Science

Washoe County's 2021 (SBTi) Scenario

GHG SBTi Target Trajectory

Scope 1 + Scope 2



4.7% Annual Reduction Required by 2030

Facilities



Conservation

- Envelope – insulation and windows
- Lightbulbs (LEDs)
- HVAC and appliances
- Internal controls – timers on lights, etc.
- Habits – turning off workstations, etc.

Offsets

- Renewable Energy potential at County facilities

Future of Work

- Maximize used space

Emphasis: Conservation over Generation, based on ROI

Draft Reduction Plan due June 2024

Fleet Sustainability Plan

- 22% of current emissions
- Identify vehicles to replace with EVs
- Telemetrics to understand use

Challenges

- Only some vehicles appropriate for EVs (currently 17)
- Need expanded charging
- Hydrogen and Renewable Diesel not available
- Supply chain & pricing



Green Team

County Staff – Volunteers for sustainable solutions

Gardens

Recycling

Green Purchasing

- Janitorial Products
- Furniture & Carpets
- Printers & Toner
- Sustainable contractors



Thank you to all staff and departments supporting Sustainability!

Community- Wide GHG Emissions



Community-Wide Emissions Reductions

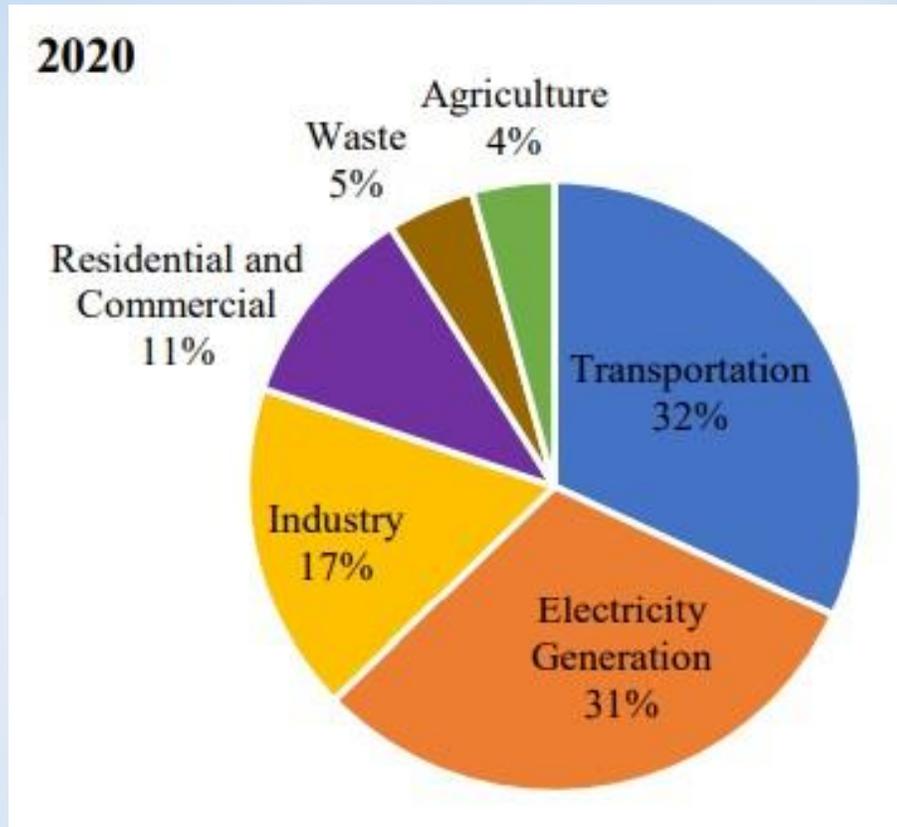


Nevada Priority Climate Action Plan (PCAP)

- Due March 1, 2024

Partners

- Nevada (NDEP)
- Reno
- Sparks
- RTC Washoe
- Expanding to tribes and other stakeholders



[ghg_report_2022.pdf \(nv.gov\)](#), page 16

Draft County-wide Reduction Plan due September 2024

Establish Urban Forestry Program



- Ensure staff capacity
- Map tree canopy
- Develop management plan – trees and forests
- Plant more trees
- Support community capacity to plant and manage

Partners: Reno, NV Division of Forestry, Tribes, NPOs

Funding Opportunities



Awarded

- ARPA – Green Recovery Plan - **\$250k**
- Energizing Rural Communities Prize – Gerlach - **\$100k**
- Energy Efficiency Conservation Block Grant (EECBG) - **\$78k**

Applied

- US DOT Charging and Fueling Infrastructure - **\$2.7m**
- Solar For All – with NV Clean Energy Fund and partners - **\$250m**

Available

- NV Division Forestry – Urban Forestry: January - **\$350k**
- EPA Climate Pollution Reduction Grant (CPRG): April - **\$2m-\$500m**
- Numerous IRA incentives
 - Direct pay
 - Bonus rates
 - Prevailing wage
 - Apprenticeships
 - Domestic content
 - Low-Income communities

Thank you

Questions?

