

ENERGY



A collective vision of an energy future for Golden is one that is in transition away from fossil fuels and includes greater independence from relying on grid energy. **Golden should position itself to have greater control over local energy choices** in interaction with Xcel Energy and invest in future technologies that will improve resiliency and ensure energy security for Golden residents and businesses.

- Renewable Energy
- Utility Cooperation
- Energy Efficiency
- Transportation
- Grid Resiliency
- Microgrids
- Distributed Generation

PROPOSED GOALS

100% RENEWABLE ENERGY

- **100%** renewable for electricity **by 2030**
- **100%** renewable for heating **by 2050** (transition away from natural gas)
- Greenhouse Gas Emission reduction aligned with Paris Accord **by 2050**

EFFICIENCY

- Reduce consumption of electricity by **15% by 2030**
- Reduce consumption of natural gas by **15% by 2030**

100% FOSSIL FUEL-FREE TRANSPORTATION

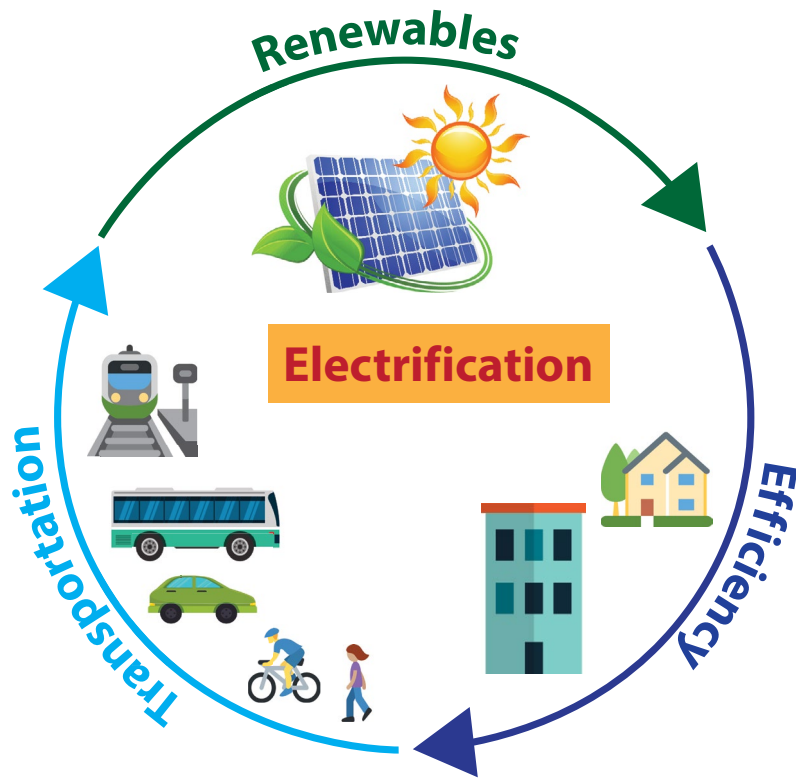
- **20%** fossil fuel-free transportation sector **by 2030**
- **100%** fossil fuel-free transportation sector **by 2050**



GOLDEN'S PROGRESS

- **81%** of residents said YES to a community solar garden
- **650kW** of solar photovoltaic on nine city buildings
- **7 Net Zero** municipal buildings
- Climate organizations memberships (CC4CA, the Compact, Climate Mayors, etc.)
- Community Solar Garden
- Green Buildings: Sustainability menu and energy codes
- Electric vehicle charging stations: **20+** new in downtown





POTENTIAL STRATEGIES

Compiled from months of public comment, the Board will research these concepts and others, thoroughly incorporate public input, and make recommendations to City Council concerning their feasibility, costs & benefits, and indication of public support.

Carbon Sequestration
City-Owned Utilities • **Water Conservation** • **Clear Creek Hydro**
Free EV Parking • **Waterless Toilets**
Solar Shingles • **Universal Transit App**
Control Streetlights • **Wind Energy** • **New Building Solar Power** • **Carbon Neutral**
Meet Paris Accord Goals • **Wind Partnerships**
Community Solar Garden • **New Building EV Charging Stations** • **Energy Advisor Program**
Energy Benchmarking • **Energy From Waste**
Electric City Vehicle Fleet • **CFL/LED Light Bulbs** • **Zero-car Households**
Smart Grid • **Alternative Transportation Strategy**
Vertical Wind Turbine
Renewable Energy Incentives
Zero Fossil Fuel Dependence
Microgrids

Distributed Generation
Virtual Net Metering

Above Code Appliances
High Efficiency HVAC

Energy Star

EXAMPLE METRICS

- Heating conversions from gas to electric
- % of renewable electric for commercial, residential, and municipal sectors
- % of fossil fuel free vehicles
- # of homes improved with energy efficiency measures

OTHER COMMUNITIES

- Already committed to **100%** renewable electricity:
 - Aspen (2030)
 - Boulder
 - Denver (2030)
 - Fort Collins (2030)
 - Lafayette
 - (in progress to adopt **80% by 2050**)
 - Longmont (50% by 2022 and **100% by 2030**)
 - Pueblo
- Solar Access ordinances:
 - Boulder, Denver, Lafayette
- Renewable power purchase:
 - Arvada, Lakewood, Longmont
- Net zero new construction:
 - Denver (2035)
 - Boulder (residential - adopted; muni - 2019; all - 2030)