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### Oversight and Internal Review

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### Thriving Earth Exchange

This project was made possible through a partnership with the Thriving Earth Exchange (TEX), the pro bono arm of the American Geophysical Union (AGU).

The mission of TEX is to strengthen and enhance collaboration among communities, scientists and partner organizations so that all communities can build health, resilient, thriving, just and ecologically responsible futures.

Support from TEX provided the initial introduction between City of Durango staff and qualified local scientists and provided structure throughout the project. The project not only delivered this GHG emissions inventory but strengthened connections between the City of Durango and Fort Lewis College that could foster additional collaboration in the future.

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### ICLEI: Local Governments for Sustainability

This inventory was completed using ICLEI's ClearPath emissions accounting tool using defined best-practice methods and with support from ICLEI staff.

ICLEI - Local Governments for Sustainability is a global network of more than 1,750 local and regional governments committed to building a sustainable future.
The City of Durango is committed to advancing climate action and preparedness in ways that improve the quality of life for present and future citizens of our community.

This inventory and analysis focus on greenhouse gas emissions occurring as a result of activities taking place within the City of Durango. The inventory will be used to prioritize actions for emissions reduction, and as a baseline for monitoring change.
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<td>2016 Residential Energy sector emissions</td>
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<td>26</td>
</tr>
</tbody>
</table>
City of Durango
2016 Community Greenhouse Gas Emissions Inventory

361,433 Tons*
greenhouse gas emissions

Energy Distribution / Transmission Losses <2%
Wastewater Treatment <1%

Solid Waste 4%

Residential Energy 17%

Commercial Energy 37%

Transportation 39%

Reduction Strategies

Water Conservation
Waste Reduction and Diversion
Renewable Energy
Energy Efficiency
Multimodal Transportation
Alternative Fuels

*Greenhouse gas emissions are measured in Metric Tons carbon dioxide equivalent (MT CO2e)
INTRODUCTION

2016 EMISSIONS INVENTORY

This greenhouse gas emissions inventory for the City of Durango represents an important step forward in taking community action to address the global challenge of climate change. In taking this step, Durango joins a movement of hundreds of local governments in the U.S. that are measuring and reporting on emissions.

The inventory accounts for and analyzes greenhouse gas emissions occurring as a result of activities taking place within the City of Durango. The inventory is intended to provide a snapshot of emissions occurring in 2016 and establish a baseline against which to monitor change. The inventory will be used to inform the development and prioritization of actions for emissions reduction, in-line with City Council Goals¹, the Municipal Sustainability Action Plan² and the Comprehensive Plan³:

Municipal Sustainability Action Plan 2015
Reduce greenhouse gas emissions generated by municipal operations
Structure City programs to encourage efficient and effective energy use

2017 Comprehensive Plan: Durango Vision Statement
Durango is an authentic, diverse and creative community living in harmony with its natural environment, pursuing economic, environmental and social sustainability.

Agencies, non-profit organizations and businesses in Durango are already taking action to reduce greenhouse gas emissions, enhance sustainability and build resilience. This report highlights existing activities while also drawing attention to sectors with the potential for further improvement and efficiency gains. Reducing community-wide emissions can have many benefits beyond reducing our collective contribution to global climate change; for example, through energy bill savings, local job creation and improved air quality.

This inventory will serve as a resource for the community and a tool with which to measure the ongoing impact of action on climate change.

WHY MEASURE GREENHOUSE GAS EMISSIONS?

Greenhouse gases (GHGs) are gases in the atmosphere that allow shortwave energy from the sun to reach the earth’s surface but absorb or trap outgoing longer-wave radiation in the lower atmosphere. Higher concentrations of these gases in the atmosphere therefore creates a ‘greenhouse’ effect resulting in higher average temperatures on Earth.

While many GHGs occur naturally in the atmosphere, such as carbon dioxide (CO2), methane (CH4), water vapor and nitrous oxide (N2O), others are entirely man-made such as chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). The concentration of GHGs in the Earth’s atmosphere has increased at an unprecedented rate since the Industrial Revolution as a result of human activities, primarily the burning of fossil fuels such as coal, oil and natural gas.

There is global scientific consensus that human-caused emissions of GHGs are responsible for observed increases in the earth’s temperature and climatic changes that pose a threat to human and ecological systems. A 2018 Special Report by the Intergovernmental Panel on Climate Change (IPCC) concluded that human activities have caused approximately 1.8°F of global warming above preindustrial levels and that impacts are already being observed around the world.⁴

The Fourth National Climate Assessment released in 2018 by the U.S. Global Change Research Program (USGCRP) highlighted impacts already being felt across the U.S., including high temperature extremes, more frequent and severe weather events, increased costal flooding, more frequent and intense wildfire and disrupted ecosystems.⁵

In Southwest Colorado, temperatures have increased by 2°F in the last three decades. Furthermore, even models using the most optimistic emissions scenarios, based on immediate and rapid global emissions reductions, project significant further warming for the region.

For the Durango area, the most significant impacts of climate change are expected to be:

• Warming
• Drought and Wildfire
• Extreme Weather Events

The IPCC identifies 2.7°F as a warming threshold at which even more catastrophic impacts will likely be observed, and states that ‘rapid’, ‘far-reaching’ and ‘unprecedented’ system transitions are required to keep global temperature increases below this threshold.³

The City of Durango recognizes that climate change will have impacts on the natural and built environment as well as its ability to foster resilience and safeguard Durango’s environment, economy and residents. In addition, the City of Durango is committed to minimizing its contribution to human-induced climate change by reducing emissions associated with municipal operations and structuring programs and services to encourage community-wide emissions reduction.

Measuring the greenhouse gas emissions occurring as a result of human activity within Durango city limits will facilitate the prioritization of actions to reduce our community’s contribution to global climate change while also increasing quality of life for present and future generations.

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SCOPE AND CONTEXT

The purpose of this inventory is to provide a snapshot of greenhouse gas emissions occurring as a result of activity within Durango city limits during 2016.

As a community-wide inventory, this report presents emissions from Durango as a whole; emissions resulting directly from City of Durango operations are presented separately in the Municipal Greenhouse Gas Emissions Inventory. The municipal inventory is a subset of the community inventory, accounting for approximately 4% of total emissions in Durango (Figure 1). For example, data on commercial energy use by the community includes energy consumed by municipal buildings and estimated community vehicle-miles-traveled includes miles driven by municipal fleet vehicles.

Durango city limits was selected as the geographical boundary for this inventory because it is the area over which the City of Durango has jurisdictional control and the area for which data was most readily available. Figure 2 shows the Durango city limits. As Durango grows, it is anticipated that city limits will shift and future inventories should therefore be considered in the context of square footage and population as well as total emissions.

In 2008, a Baseline Greenhouse Gas Emissions Inventory was completed for La Plata County using 2005 data. Since 2008, best-practice methodology for completing GHG inventories has progressed, as more communities commit to monitoring and reporting on emissions. In addition, the 2008 inventory was completed for all of La Plata County and does not provide information at the city scale. As a result, it cannot be directly compared to this 2016 inventory.

The 2008 La Plata County inventory included emissions not present inside city limits, including agricultural and oil and gas industry emissions. By omitting these categories, it is possible to compare 2005 per capita La Plata County emissions with 2016 per capita emissions for the City of Durango.

US census population estimates were used for total population and American Community Survey (ACS) 5-year estimates for number of households. In future inventories, total emissions will be compared to this 2016 baseline, and also tracked on a per capita, per household and per square mile basis.

Where information was not available at the city level, data was scaled from the county level using resident or daytime population based on census estimates.

**PROTOCOL ADHERENCE**

The 2016 inventory was conducted using the ICLEI – Local Governments for Sustainability (ICLEI) ClearPath data reporting and analysis tool. The inventory uses the approach and methods provided by the Global Protocol for Community-Scale Emissions (GPC). The GPC is the most current and widely-used standard defining what emissions must be reported on and how. In addition, this inventory draws on methods established in the ICLEI U.S. Community Protocol (USCP), which provides more detailed methodology specific to U.S. communities.

Per the GPC, emissions are reported according to the primary sector categories of Stationary Energy (Commercial and Residential), Transportation and Waste (Solid Waste and Wastewater) Process and fugitive emissions from natural gas and transmission and distribution loss from electricity are also reported. The GPC also requires reporting of emissions by "scope", according to whether emissions originate from inside or outside of city limits.

According to GPC best-practice, emissions are reported in metric tons of carbon dioxide equivalent (CO2e) and include the sum of contributions from carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O) from energy/fuel use and waste generation. Emissions of CH4 and N2O are converted to CO2e using the IPCC 5th Assessment Global Warming Potential 100-year values.

Emissions are quantified using activity data such as kWh electricity consumption, vehicle miles travelled, and emissions factors expressed in terms of emissions per unit of activity data (e.g. lbs CO2/kWh electricity). Data sources and specific emissions factors are described below.

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8. American FacFinder - Census Bureau, [https://factfinder.census.gov](https://factfinder.census.gov)
SUMMARY OF RESULTS

In accordance with the GPC, this inventory quantifies emissions in the following sectors:

- Commercial Energy
- Residential Energy
- Transportation
- Solid Waste
- Wastewater Treatment

In addition to these categories, the inventory also includes process and fugitive emissions from natural gas distribution within Durango city limits as well as losses from the transmission and distribution of electricity.

In 2016, total community greenhouse emissions were estimated to be 361,433 MT CO2e which equates to approximately 19.5 MT CO2e per capita.

For comparison, excluding the oil and gas and agricultural sectors, 2005 La Plata County per capita emissions were approximately 28 MT CO2e. Figure 3 shows how City of Durango per capita emissions compare to other communities with recently published inventories. It is important to remember that, despite the widespread use of GPC and USCP protocols, the methodologies used in different communities as well as the availability and accuracy of data, varies considerably. This community-level comparison is therefore intended to be used for illustrative purposes only.

Figure 3. Per capita GHG Emissions in MT CO2e per capita for illustrative purposes only.

* For comparison with City emissions, the La Plata County emissions presented here exclude Oil and Gas Industry, Land Use and Coal Mining emissions quantified in the 2005 inventory and include only emissions in the Commercial Energy, Transportation & Mobile Sources, Residential Energy, Solid Waste and Water & Wastewater categories.
### SUMMARY OF RESULTS: BY SECTOR

<table>
<thead>
<tr>
<th>Sector</th>
<th>Durango 2016</th>
<th>La Plata County 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emissions</td>
<td>Per capita</td>
</tr>
<tr>
<td></td>
<td>(MT CO₂e)</td>
<td>(MT CO₂e)</td>
</tr>
<tr>
<td></td>
<td>% Total</td>
<td>% Total</td>
</tr>
<tr>
<td>Transportation &amp; Mobile Sources</td>
<td>140,297</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>39%</td>
<td>40%</td>
</tr>
<tr>
<td>Commercial Energy</td>
<td>135,048</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>37%</td>
<td>26%</td>
</tr>
<tr>
<td>Residential Energy</td>
<td>62,606</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>17%</td>
<td>28%</td>
</tr>
<tr>
<td>Solid Waste</td>
<td>15,922</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Transmission &amp; Distribution Loss</td>
<td>5,690</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Process &amp; Fugitive</td>
<td>1,776</td>
<td>0.1</td>
</tr>
<tr>
<td>Wastewater Treatment</td>
<td>93</td>
<td>0.01</td>
</tr>
<tr>
<td>Other</td>
<td>1307</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>&lt;0.5%</td>
<td>&lt;0.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>361,433</strong></td>
<td><strong>19.5</strong></td>
</tr>
</tbody>
</table>

**Table 2.** 2016 Durango and 2005 La Plata County emissions summary by sector. La Plata County Emissions have been reallocated using GPC sectors. Oil and gas, land use and coal mining emissions are excluded for the purposes of this comparison. Population estimates are taken from US Census data (Durango 2016 population: 18,503; La Plata County 2005 population: 47,792). Values are rounded.
INTRODUCTION

SUMMARY OF RESULTS: BY SCOPE

The GPC calls for reporting of emissions by "scope". Scope 1 refers to emissions produced within city limits. This includes local combustion of all fossil fuels such as gasoline, diesel, natural gas, propane and other fuel. Methane produced from wastewater treatment inside city limits is also included in Scope 1.

Scope 2 emissions include greenhouse gas emissions that occur as a result of using grid-supplied electricity within the city, but where the actual emissions occur outside city limits.

Scope 3 emissions include all other greenhouse gas emissions that occur outside of the city resulting from activities that take place within city limits. This includes the portion of emissions attributed to the Durango as a result of activities at Durango-La Plata Airport, which is physically located outside of city limits.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Emissions (MT CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope 1: Emissions produced inside city limits</strong></td>
<td>192,174</td>
</tr>
<tr>
<td>Transportation &amp; Mobile Sources</td>
<td></td>
</tr>
<tr>
<td>• On-road vehicles</td>
<td>131,761</td>
</tr>
<tr>
<td>• Durango Transit</td>
<td></td>
</tr>
<tr>
<td>• Off-road vehicles</td>
<td></td>
</tr>
<tr>
<td>Commercial Energy</td>
<td></td>
</tr>
<tr>
<td>• Commercial Natural Gas</td>
<td>33,364</td>
</tr>
<tr>
<td>• Durango &amp; Silverton Narrow Gauge Railroad</td>
<td></td>
</tr>
<tr>
<td>Residential Energy</td>
<td></td>
</tr>
<tr>
<td>• Natural Gas and other fuels</td>
<td>25,183</td>
</tr>
<tr>
<td>Process &amp; Fugitive</td>
<td></td>
</tr>
<tr>
<td>• Natural Gas fugitive emissions</td>
<td>1,774</td>
</tr>
<tr>
<td>Wastewater Treatment</td>
<td></td>
</tr>
<tr>
<td>• Wastewater treatment process emissions</td>
<td>92</td>
</tr>
<tr>
<td><strong>Scope 2: Grid-supplied electricity used inside city limits</strong></td>
<td>138,603</td>
</tr>
<tr>
<td>Commercial Energy</td>
<td></td>
</tr>
<tr>
<td>• Grid-supplied electricity</td>
<td>101,180</td>
</tr>
<tr>
<td>Residential Energy</td>
<td></td>
</tr>
<tr>
<td>• Grid-supplied electricity</td>
<td>37,423</td>
</tr>
<tr>
<td><strong>Scope 3: all other emissions resulting from activities within city limits</strong></td>
<td>30,654</td>
</tr>
<tr>
<td>Solid Waste</td>
<td></td>
</tr>
<tr>
<td>• Residential waste</td>
<td>15,922</td>
</tr>
<tr>
<td>• Commercial waste</td>
<td></td>
</tr>
<tr>
<td>• Construction and Demolition waste</td>
<td></td>
</tr>
<tr>
<td>Durango-La Plata Airport</td>
<td></td>
</tr>
<tr>
<td>• Equipment and vehicles</td>
<td>9,041</td>
</tr>
<tr>
<td>• Aviation fuel</td>
<td></td>
</tr>
<tr>
<td>• Grid-supplied electricity and natural gas</td>
<td></td>
</tr>
<tr>
<td>• Wastewater treatment</td>
<td></td>
</tr>
<tr>
<td>Upstream Impacts of Activities</td>
<td></td>
</tr>
<tr>
<td>• LPEA Transmission and distribution losses</td>
<td>5,690</td>
</tr>
</tbody>
</table>

Table 3. Durango 2016 emissions by scope
TRANSPORTATION & MOBILE SOURCES

Transportation emissions include estimates of on-road vehicle transportation, off-road equipment, Durango Transit, and the portion of aviation fuel use at the Durango-La Plata Airport attributed to Durango.

Emissions associated with the Durango and Silverton Narrow Guage Historic Railroad are included in the Commercial Energy sector. No watercraft emissions were included in this inventory. With the opening of Lake Nighthorse, these will be included in future inventories if available.

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>2016 Emissions (MT CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-road transportation</td>
<td>131,328</td>
</tr>
<tr>
<td>Public Transit</td>
<td>608</td>
</tr>
<tr>
<td>Off-road Vehicles</td>
<td>210</td>
</tr>
<tr>
<td>Aviation</td>
<td>8,151</td>
</tr>
<tr>
<td>TOTAL</td>
<td>140,297</td>
</tr>
</tbody>
</table>

Table 4. 2016 Transportation sector emissions (rounded)

ON-ROAD TRANSPORTATION

Emissions resulting from on-road transportation are estimated using annual Vehicle Miles Travelled (VMT) calculated by consultants Fehr and Peers using the La Plata County Travel Demand Model. Total estimated La Plata County 2015 VMT is scaled by day-time population for the area inside city limits. ICLEI Clear Path uses default averages for the percentage of gas and diesel vehicles in each category.

This inventory does not include an estimate of emissions associated with electric vehicles. In 2016, emissions associated with electric vehicles in Durango were negligible. As the number of plug-in electric vehicles in the region grows, this will be an important category to account for in future inventories.

A small amount of emissions (<0.3% of On-road Transports) associated with fuel use at the Durango-La Plata Airport are included in the inventory. Airport fuel use included in this category includes fuel sales to tenants and vehicle rental companies based at the airport as well as use by Airport on-road vehicles. Emissions occurring at the Durango-La Plata Airport are attributed to Durango based on passenger survey data.

On-road transportation accounts for 94% of total Transportation emissions.

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12. Visit [www.durangogov.org/compplan](http://www.durangogov.org/compplan) to view the City of Durango 2017 Comprehensive Plan. VMT calculations can be on in Table 1 on p.30 of Appendix D: Plan Alternatives.
In accordance with the USCP guidance, off-road vehicle emissions are estimated using county level data from the EPA MOVES model\textsuperscript{14}, scaled for City of Durango population. EPA MOVES estimates emissions occurring as a result of fuel use in industrial, construction and other off-road equipment. This category also includes emissions associated with off-road equipment use at Durango-La Plata Airport, calculated using city fuel data and attributed based on passenger survey data. Off-road vehicle emissions account for 0.2% of total Transportation emissions.

Emissions resulting from the Durango and Silverton Narrow Gauge Historic Railroad (D&SNGRR) are included in the Commercial Energy sector as the train is considered a commercial use rather than a mode of transportation.

**AVIATION**

Although the Durango-La Plata Airport is not located within Durango city limits, a portion of emissions associated with aviation fuel use at the airport is attributed to Durango based on passenger survey data, in accordance with the GPC.

Surveys reveal that 41% of passengers at the Durango-La Plata Airport are either Durango residents or visitors staying in Durango during their trip.

Use of aviation fuel (Jet A and AVGAS) at the airport is tracked and Durango's 41% share of the total accounts for 6% of total Transportation emissions.

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Reducing Transportation Emissions

**Multimodal Transportation**

The City of Durango 2016 Multimodal Transportation Plan prioritizes 450 projects aimed at moving people, not automobiles. The vision of the plan is to create a fully-connected transportation network that provides for an outstanding transit, bicycling and walking community in Durango.

"A measure of achieving this vision is that a middle-school age child is able to safely and conveniently access transit and bike or walk independently throughout Durango and its environs."

**Electric Vehicles (EVs)**

Electric Vehicles have lower emissions per vehicle mile travelled than traditional vehicles. As more renewables are integrated into the electrical grid supply, emissions associated with EV travel will be further reduced.

As the availability and affordability of EVs improves, EV market penetration will increase and the emissions associated with each vehicle mile traveled will fall.

The Four Corners Office for Resource Efficiency (4CORE) provides resources, guidance, and group buy programs to encourage EV uptake.

**Clean Commuting**

Getting around town by means other than a single occupancy vehicle will reduce VMT and GHG emissions (see below).

Clean Commute Week provides a fun way to try out alternative modes of transportation. The Way to Go! Club enables residents to track trips and earn rewards for clean commuting.

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**Figure 6.** Estimated annual commute emissions for 10 individuals commuting 5 miles each way 5 days per week for one year. Emissions calculated using EPA emissions factors and life-cycle analysis by the European Cyclists’ Federation.
COMMERCIAL ENERGY

Commercial Energy includes electricity and natural gas used by commercial accounts, held by businesses, schools and government entities.

In addition, the commercial electricity and natural gas sub-sectors include a portion of emissions associated with use at Durango-La Plata County Airport, and emissions resulting from the Durango and Silverton Narrow Gauge Railroad (D&SNGRR) train.

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>2016 Emissions (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Electricity</td>
<td>101,180</td>
</tr>
<tr>
<td>Commercial Natural Gas</td>
<td>30,253</td>
</tr>
<tr>
<td>D&amp;SNGR</td>
<td>3,112</td>
</tr>
<tr>
<td>Airport Electricity and Gas</td>
<td>503</td>
</tr>
<tr>
<td>TOTAL</td>
<td>135,048</td>
</tr>
</tbody>
</table>

Table 5. 2016 Commercial energy sector emissions (rounded)

COMMERCIAL ELECTRICITY

Electricity consumption by commercial entities within Durango city limits during 2016 was provided by La Plata Electric Association (LPEA).

During 2016, 127,092 MWh of electricity was used by commercial accounts within Durango. An emissions factor of 1746 lbs CO₂ per MWh, reflecting LPEA's grid mix as a member of Tri-State Generation and Transmission, was provided by LPEA and used to determine CO₂e emissions resulting from this level of consumption.

Commercial electricity use accounts for 75% of all 2016 Commercial Energy emissions.

COMMERCIAL NATURAL GAS

Natural gas consumption by commercial entities within Durango city limits during 2016 was provided by Atmos Energy. Energy use in millions of Metric British Thermal Units (MMBTu) is converted to emissions in CO₂e in ICLEI ClearPath per the GPC and accounts for 22% of commercial energy emissions.
**DURANGO & SILVERTON NARROW GAUGE RAILROAD**

Direct emissions of greenhouse gases resulting from the burning of coal to power Durango’s historical railroad trains is estimated based on data previously provided about the weight of coal burned per trip and publicly available schedule information. This methodology is consistent with that used in the 2005 La Plata County Emissions Inventory.

Emissions included in this inventory are based on 50% of Durango to Silverton D&SNGRR trips being attributed to Durango, with the other 50% assumed to be attributed to Silverton. 100% of emissions from Cascade and Polar Express trips which begin and end in Durango are included in this inventory. D&SNGRR emissions account for 2% of Commercial Energy emissions.

**DURANGO-LA PLATA AIRPORT ELECTRICITY AND NATURAL GAS**

Electricity and natural gas consumption at the Durango-La Plata Airport was provided by LPEA and Black Hills Energy. As the airport is not located within Durango city limits, emissions are attributed to Durango using the methodology previously described for aviation fuel emissions. Airport energy use accounts for 0.3% of Commercial Energy emissions.

A 19.7kWp solar PV system on the roof of the Durango-La Plata Airport Terminal reduces emissions associated with the purchase and use of grid electricity at that facility. The system generates over 30,000 kWh per year.
Reducing Commercial Energy Emissions

Energy Conservation

Conserving energy through changes in behavior and processes is the cheapest and easiest way to reduce energy use.

Training staff how to save energy, for example by turning off lights, computers and other electronics at the end of the day, or turning the thermostat down a couple of degrees is a ‘quick win’ for saving money and reducing emissions.

Energy Efficiency

La Plata Electric Association, Atmos Energy and Black Hills Energy all offer incentives for both commercial and residential energy audits and efficiency measures.

During 2016, LPEA issued $127,809 in commercial lighting retrofit rebates within city limits. These rebates represent 1,632,384 kWh in electricity savings and 1,230 MT avoided emissions CO2e based on ICLEI ClearPath calculations.

Electrical Grid

Reducing the carbon intensity (MT CO2 / kWh) of Durango’s electricity supply will have significant impacts on Commercial and Residential Energy emissions.

In 2019, LPEA announced a commitment to reduce its carbon footprint by 50% from 2018 levels by 2030.

Renewable Energy

After energy conservation and efficiency measures have been taken, renewable generation can be used to meet the remaining demand and further reduce emissions.

Businesses can install solar PV ‘behind-the-meter’ under LPEAs Net Metering Program.

LPEA also offers customers the option to purchase Renewable Energy Credits (RECs) through their ‘Just One Block program’. Purchasing RECs through LPEA or another third party provides organizations and individuals with an affordable option to offset the greenhouse gas emissions associated with electricity use. During 2016, residents and businesses in Durango purchased RECs sufficient to offset 26,320,072 kWh of electricity. The City of Durango currently purchases 100% Green Power through LPEA.

RECs are not included as offsets for the purposes of this GHG inventory.
RESIDENTIAL ENERGY

Residential Energy includes electricity and natural gas used by residential accounts within Durango city limits. In addition, this sector includes a small amount of emissions from the burning of wood, bottled gas and fuel oil for heat.

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>2016 Emissions (MT CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Electricity</td>
<td>37,423</td>
</tr>
<tr>
<td>Residential Natural Gas</td>
<td>24,127</td>
</tr>
<tr>
<td>Bottled, Tank or LP Gas</td>
<td>879</td>
</tr>
<tr>
<td>Residential Wood, Fuel Oil or Kerosene</td>
<td>178</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>62,606</strong></td>
</tr>
</tbody>
</table>

Table 6. 2016 Residential Energy sector emissions (rounded)

RESIDENTIAL ELECTRICITY

Electricity consumption on residential accounts within Durango city limits during 2016 was provided by La Plata Electric Association (LPEA) and represents 60% of all emissions from Residential Energy use.

Emissions are calculated using the Tri-State Generation and Transmissions emissions factor provided by LPEA.

RESIDENTIAL NATURAL GAS

Utility provided natural gas is the primary source of heat for Durango residents. According to ACS 5-year estimates, 69.8% of housing units in Durango were heated by utility gas.

Natural gas consumption by residential accounts within Durango city limits during 2016 was provided by Atmos Energy and accounts for 39% of emissions from Residential Energy use.

OTHER RESIDENTIAL HEATING FUELS

Bottled/tank/LP gas and residential fuel oil/kerosene emissions are estimated using ACS 5-year estimates for 2016 heating source and average MMBTU per household heating load from gas data. According to ACS estimates, 2.1% of Durango residents used bottled, tank or LP gas to heat their home, and 0.2% used fuel oil or kerosene in 2016.
Reducing Residential Energy Emissions

Understanding Energy Use

Getting a professional energy audit of your home is a good first step to understanding and managing your energy use.

LPEA and Atmos Energy offer rebates for residential and commercial energy audits, which provide information on how a building is performing, and what steps can be taken to make it more efficient.

An increasing number of communities are introducing policies that require a home’s energy efficiency be disclosed at the time of sale or listing. These policies are known as ‘Home Energy Labeling’ and use energy audits and standard metrics such as the Home Energy Score that allow buyers to consider efficiency and potential energy cost when purchasing a home.

Energy Efficiency

Purchasing energy efficient equipment and installing efficiency measures in your home can not only reduce emissions but save money and make your home more comfortable year-round.

Similar to the commercial incentives described above, utility providers in Durango offer rebates to residential customers for energy efficiency measures.

During 2016, LPEA provided 116 LED lighting rebates totaling $10,425, saving 116,844 kWh electricity, or over 93 MT CO2e. LPEA also issued 119 rebates for efficient Energy Star Appliances totaling $4,242 to members inside Durango city limits. Go to [www.lpea.com/rebate-programs](http://www.lpea.com/rebate-programs) for more information.

Atmos Energy provides rebates for energy saving equipment such as efficient boilers, programmable thermostats and insulation. Go to [www.atmosenergy.com](http://www.atmosenergy.com) for more information.

Renewable Energy

Installing renewable energy generation at home is one way that Durango residents can cut emissions while also reducing their energy bill and reliance on grid-supplied energy.

With close to 300 days of sunshine every year, Southwest Colorado is a great place to install solar photovoltaics. LPEA’s net metering program allows residential and commercial customers to install solar and have their meter ‘spin backwards’. In 2016 there were 229 net metered accounts in the City of Durango, generating over 2,700,000 kWh annually and saving over 2,000 MT CO2e.

Go to [www.durangogov.org/solar](http://www.durangogov.org/solar) for more information, visit [www.sunnumber.com](http://www.sunnumber.com) to see the solar potential of your home, or contact one of Durango’s local solar installers for a professional assessment!

LPEA residential customers can also purchase Renewable Energy Credits (RECs) through the ‘Just One Block’ program.

In 2017, Durango City Council took steps to ensure the efficiency of new buildings in Durango by approving adoption of the 2015 International Energy Conservation Code (IECC), replacing the 2009 IECC. The IECC establishes a required baseline for efficiency in new construction, thereby reducing the future emissions associated with new commercial and residential buildings in Durango.

According to a 2016 report prepared for the U.S. Department of Energy, a 2015 IECC compliant residential building in Durango's climate zone will realize annual energy savings of $318 in year one compared to a 2009 IECC compliant building, a 19.2% average saving. The payback period, taking into account increased costs and energy savings, for compliance with the newer code is predicted to be 4.6 years.

Ensuring the energy efficiency of new buildings not only contributes to City Council's sustainability goals and actions identified in the Sustainability Action Plan, Comprehensive Plan and LEED for Cities framework, but also secures long term financial savings and comfort gains for future building owners and occupants.

Durango's Urban Forest as a Carbon Sink

This inventory accounts for emissions of greenhouse gases occurring as a result of activities inside Durango city limits but does not quantify emissions resulting from the way land is managed.

Land use can result in GHG emissions but can also lead to the removal of CO₂ from the atmosphere. In the U.S., land use is a net sink, with removals of CO₂, mostly into forests and trees, exceeding emissions occurring as a result of conversion to grassland, cropland and settlements.¹⁶

The City of Durango Forestry Division maintains over 8,000 urban trees and the City is a designated Tree City USA. Durango's urban trees not only provide shade, stormwater mitigation, air quality benefits, noise reduction and social benefits, but also act as an important carbon sink.

The City of Durango Tree Inventory¹⁷ and Community Forest Management Plan¹⁸ provide more information on the benefits of trees in Durango.

SOLID WASTE

The solid waste sector includes emissions resulting from the disposal of residential, commercial and construction waste generated inside Durango city limits. Emissions in this sector are predominantly related to the generation of methane as organic matter decomposes under anaerobic conditions. The calculation for greenhouse gas emissions for solid waste disposal is made based on the characteristics of the landfill in which material is deposited as well as a characterization of local waste.

Waste collected in Durango is deposited in either the WCA operated Bondad Landfill, or the San Juan County Landfill operated by Waste Management, neither of which were capturing methane in 2016. Local waste characterization is based on a 2015 residential and commercial waste audit conducted by the Southwest Colorado Council of Governments (SWCCOG).19

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>2016 Emissions (MT CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Solid Waste</td>
<td>9,999</td>
</tr>
<tr>
<td>Commercial Solid Waste</td>
<td>5,876</td>
</tr>
<tr>
<td>Construction and Demolition Waste</td>
<td>47</td>
</tr>
<tr>
<td>TOTAL</td>
<td>15,922</td>
</tr>
</tbody>
</table>

Table 7. 2016 Solid Waste sector emissions (rounded)

RESIDENTIAL SOLID WASTE

The City of Durango provides solid waste collection services to all single family and duplex residences within city limits. Total solid waste collected from residential accounts in 2016 is estimated based on the number of accounts served, together with container size.

Residential waste generation in 2016 is estimated to be 5,741 tons and accounts for 63% of total solid waste emissions.

COMMERCIAL SOLID WASTE

The collection and hauling of solid waste from commercial entities in Durango operates as an open market. In 2016, the City of Durango served 435 commercial trash accounts; the remainder of businesses with trash collection were served by one of several private haulers operating in the area. Commercial accounts include multifamily complexes with eight or more units.

Total commercial waste collected within Durango is estimated based on an estimated average per-business waste generated by businesses served by the City. Of 1,221 entities with a 2016 City of Durango business license and a physical presence inside city limits, an estimated 50% have commercial trash service, based on the type of business and street address.

Commercial waste collected in 2016 is estimated at 2,789 tons and accounts for 37% of total solid waste emissions in 2016.

CONSTRUCTION AND DEMOLITION WASTE

Construction and demolition waste sent to landfill in 2016 is estimated at 188 tons and accounts for less than 1% of total solid waste emissions.

Construction and demolition waste collection is provided by several private companies in Durango. The total weight of waste is generated is estimated at 269 tons using sample job data provided by Phoenix Recycling, and the square footage of 2016 construction, demolition and remodel projects from City of Durango permit data. Of this total, an estimated 188 tons was sent to landfill and total emissions are estimated using the EPA WARM model.\(^\text{20}\)

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\(^{20}\) EPA WARM (Waste Reduction Model), [www.epa.gov/warm](http://www.epa.gov/warm).

Bales of single stream recyclable material await transportation from the Durango Recycle Center. Recycling reduces emissions associated with the break-down of waste in landfill.
Reducing Solid Waste Emissions

Reduce

Reducing the total volume of resources used and waste produced is the most efficient way of cutting emissions from the disposal of solid waste. Simple actions such as avoiding single-use items (e.g. straws, napkins and plastic bags), avoiding food waste, purchasing goods in bulk and signing up for paperless billing can add up to a significant reduction in waste generated.

Reuse

Reusing and repurposing items is another efficient way to keep waste out of landfill. Purchasing high quality, durable products that can be repaired and reused or passed on can help eliminate unnecessary waste.

Purchasing pre-loved items such as furniture, clothes and toys from thrift stores or neighbors not only reduces waste but can benefit local non-profits and build community. Consider donating items that can be refurbished and provide value to someone else.

Items that are at the end of their useful life may be repurposed for added value; for example, old t-shirts become cleaning rags, scraps of wood and paper could become craft projects.

Recycle

Recycling old materials into new products is the final way to keep waste out of landfill and reduce the use of new resources.

The City of Durango offers single stream recycling collection to residents and businesses within city limits and during 2016 sent a total of 3,953 tons of material off to be recycled.

<table>
<thead>
<tr>
<th>Material</th>
<th>Tons Recycled</th>
<th>Avoided Emissions (MT CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Stream</td>
<td>2,482</td>
<td>9,781</td>
</tr>
<tr>
<td>Cardboard (OCC)</td>
<td>889</td>
<td>4,225</td>
</tr>
<tr>
<td>Mixed Glass</td>
<td>486</td>
<td>129</td>
</tr>
<tr>
<td>Electronics</td>
<td>93</td>
<td>232</td>
</tr>
<tr>
<td>Batteries</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3,953</td>
<td>14,367</td>
</tr>
</tbody>
</table>

Table 8. 2016 Estimated emissions avoided by recycling

Avoided emissions are estimated using the EPA WARM model which takes into account landfill characteristics and the distance travelled to disposal. No emissions conversion was available for battery recycling.

Go to DurangoRecycles.com to find out what can and cannot be recycled in Durango.

Food Waste

An estimated 30% of Durango’s solid waste is organic material, including food waste and yard trimmings.

The U.S. Department of Agriculture (USDA) estimates that approximately 31% of all available food is not eaten. Before sending food to landfill, consider reducing waste through planning, using leftovers, donating excess food or feeding scraps to animals. For more information on food recovery, contact the Good Food Collective.

Where food cannot be recovered consider composting, either at home or through Table to Farm, Durango’s local curbside organic waste collection service. Table to Farm estimate that they have helped Durango residents avoid approximately 109 tons of CO2e by diverting organic waste from landfill since the business launched in 2016.
TRANSMISSION & DISTRIBUTION LOSSES

Emissions associated with losses occurring during the transmissions and distribution of electricity are estimated based on total electricity consumption, and emissions and grid loss factors provided by LPEA. The system-wide grid loss factor is 4.1%, resulting in additional emissions of 5,690 MT CO2e associated with electricity use on residential and commercial accounts inside city limits as well as airport use attributed to Durango.

The emissions associated with transmission and distribution losses will fall as total electricity consumption is reduced and as the emissions factor associated with LPEA's grid supply is reduced.

PROCESS & FUGITIVE

Process and fugitive emissions result from the leakage of methane from the local distribution of natural gas. Leakage is estimated using the ClearPath default value of 0.3% from the Environmental Defense Fund (EDF) User Guide for Natural Gas Leakage Rate Modeling Tool, and the total MMBtu of natural gas used on residential and commercial accounts as well as airport use attributed to Durango.

The emissions associated with methane leakage on natural gas distribution will fall as total natural gas consumption is reduced.

WASTEWATER TREATMENT

Wastewater treatment emissions are estimated based on the volume of wastewater and treatment processes in place at both the City of Durango Wastewater Treatment Plant (WWTP) and the Durango-La Plata Airport.

Emissions in this sector are direct and do not include the use of grid-supplied energy consumed at the treatment facility, which is included in the commercial energy sector.

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>2016 Emissions (MT CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWTP Digester Gas to Flare</td>
<td>49</td>
</tr>
<tr>
<td>WWTP Nitrification/Denitrification Process N2O</td>
<td>37</td>
</tr>
<tr>
<td>WWTP Effluent Discharge</td>
<td>5</td>
</tr>
<tr>
<td>Durango-La Plata County Airport Wastewater</td>
<td>2</td>
</tr>
<tr>
<td>WWTP Digester Gas to Turbine</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>93</strong></td>
</tr>
</tbody>
</table>

Table 9. 2016 Wastewater sector emissions (rounded)

**RESULTS**

**WWTP DIGESTER GAS TO FLARE**

Emissions associated with the flaring of digester gas are calculated using data provided by the City of Durango Utilities Department. The Durango Wastewater Treatment Facility is equipped with a cogeneration turbine which generates electricity for use on-site and was operational for 223/366 days during 2016. On days when the turbine is operating, 50% of digester gas is sent to the turbine and 50% is flared. On days when the turbine is not operating, 100% of digester gas is flared.

The daily average volume of digester gas sent to flare during 2016 was 34,768 scf. Assuming a standard destruction efficiency of 99% and gas composition of 73.5% CH₄ from analysis undertaken by a third party during 2016, CO₂e emissions are estimated at 49 MT and account for 53% of all Wastewater emissions.

**WWTP NITRIFICATION/DENITRIFICATION PROCESS N₂O**

Nitrous Oxide (N₂O) generated by wastewater treatment is calculated in ClearPath based on local treatment processes and the population served by the wastewater treatment plant. The City of Durango Wastewater Treatment Plant includes the removal of nitrogen by biological nitrification/denitrification as a step in the treatment process.

N₂O is a greenhouse gas with 265 times the global warming potential (GWP) of CO₂, meaning that just 0.14 MT of N₂O equates to 37 MT CO₂e, accounting for 39% of the sector total.

**WWTP EFFLUENT DISCHARGE**

Emissions of N₂O associated with the discharge of effluent to the Animas River is calculated based on the kg/day Nitrogen load provided by the City of Durango Utilities Division, and the population served.

Emissions are estimated at 0.018 MT N₂O, equating to 4.7 MT CO₂e and accounting for 5% of total Wastewater Treatment emissions.

**WWTP DIGESTER GAS TO TURBINE**

The average daily volume of digester gas sent to the turbine during 2016 was 15,232 scf. ClearPath calculates emissions associated with the production of digester gas from which energy is recovered and used on-site based on the volume and composition of gas generated, in compliance with the GPC. Emissions from digester gas sent to the turbine during the 223 days on which it was operational account for just 5% of all wastewater emissions.

While the cogeneration turbine at the Wastewater Treatment Facility is represented here as a source of emissions, the use of digester gas to generate electricity for on-site use also results in reduced emissions from the flaring of digester gas and the use of grid electricity.

In 2016, approximately 20 MT CO₂e emissions were avoided in the Wastewater Treatment sector as a result of avoided flaring. A further 131 MT CO₂e where avoided under the Commercial Energy sector through the generation and on-site use of approximately 164,561 kWh of electricity.
DURANGO-LA PLATA AIRPORT WASTEWATER TREATMENT

The Durango-La Plata Airport treats wastewater in on-site lagoons. Per the GPC, lagoon treatment emissions of CH4 are calculated based on the 5-day biochemical oxygen demand (BOD5) of wastewater and the fraction removed in primary treatment.

Emissions from wastewater treatment at the Durango-La Plata County Airport are attributed to Durango based on passenger surveys, as in other sector calculations. CH4 emissions are converted to CO2e using a GWP of 28\textsuperscript{18}, and account for 2% of the sector total.

Reducing Wastewater Treatment Emissions

Conservation

Conserving water and thereby reducing the volume of wastewater generated will reduce the total emissions associated with wastewater treatment.

Santa Rita Water Reclamation Facility

In 2017, construction began on the Santa Rita Water Reclamation Facility, replacing the Wastewater Treatment Plant. The new plant will ensure compliance with Colorado Department of Public Health and Environment (CDPHE) regulations and adequate capacity to support Durango’s growing population.

While the impact of the new plant on emissions is uncertain, adding an additional anaerobic digester and technological upgrades in the treatment process to meet CDPHE water quality regulations should result in decreased emissions of CH4 and N2O in this sector.

Cogeneration capacity at the new Water Reclamation Facility will be double that at the old facility, allowing more electricity to be generated from waste methane and reducing grid electricity consumption at the facility. This will be reflected in the municipal emissions inventory and contribute to reduced emissions in the Commercial Energy Sector previously described.
CONCLUSION

This analysis found that the Durango community as a whole was responsible for emitting 361,433 metric tons of CO2e in the base year 2016, with emission from the Transportation, Commercial and Residential Energy sectors contributing the most to this total.

This inventory will be used to provide context as Durango considers the development of emissions reduction goals and strategies. The inventory will inform an update of the City of Durango Sustainability Action Plan and will be used to prioritize a list of actions to achieve and document emission reductions in sectors subject to municipal influence. The City will consider the emissions reduction benefits of sustainability strategies that could be implemented in the future, including energy efficiency, renewable energy, vehicle fuel efficiency, alternative transportation, vehicle trip reduction, land use and transit planning and waste reduction.

City of Durango staff will update this inventory every three years and will continue to refine data collection and analysis methodology. For example, city staff will explore the possibility of using an updated traffic demand model to estimate emissions for on-road transportation and will look into the possibility of standardized reporting for solid waste collection inside city limits.

NEXT STEPS

- Communicate inventory results through events, media and City of Durango website
- Use inventory to inform Sustainability Action Plan update process
- Evaluate the potential for emissions reduction in each sector and develop and prioritize a list of actions to achieve and document emissions under municipal control.
On August 20th 2019, Durango City Council unanimously passed a resolution to adopt new greenhouse gas emissions and renewable electricity goals, both for City operations and for the community as a whole:

1. **Greenhouse Gas Emissions Reduction Goal**
   An 80% reduction from 2016 levels by 2050, with an interim goal of 30% by 2030

2. **Renewable Electricity Goal**
   100% renewable electricity by 2050, with an interim goal of 50% by 2030.

This 2016 inventory will serve as a benchmark against which to evaluate the potential for emissions reductions and measure progress going forward. Strategies for meeting the goals adopted will be developed through an upcoming Sustainability Plan update.

**Figure 11. 2030 and 2050 Emissions Reduction Goals**
### ACS
- **American Community Survey**: an ongoing survey by the U.S. Census Bureau.

### Carbon intensity
- The emission rate of carbon relative to a specific activity, for example lbs of carbon dioxide released per kWh of electricity generated.

### ClearPath
- Developed by ICLEI, ClearPath is the leading online software system for completing greenhouse gas inventories. Use of the software is included for ICLEI members.

### CO2e
- Carbon Dioxide Equivalent: a standard unit for expressing the impact of different greenhouse gases in terms of the amount of carbon dioxide that would create the same amount of warming.

### Cogeneration
- Generation of electricity from methane-rich digester gas produced as a byproduct of the wastewater treatment process.

### Community-wide Emissions
- Emissions occurring as a result of activities within a geographical boundary.

### D&SNGRR
- Durango and Silverton Narrow Gauge Railroad: the railroad runs 45.2 miles between Durango and Silverton and, in 2016 ran exclusively on coal. [www.durangotrain.com](http://www.durangotrain.com)

### Durango city limits
- The geographical boundary to the City of Durango. The boundary can be viewed using the [City's GIS system](http://www.durangotraining.com).

### Emissions Factor
- A factor that converts activity data into GHG emissions data (e.g. lbs CO2e per gallon of fuel consumed).

### EPA MOVES
- The EPA's Motor Vehicle Emission Simulator is a state-of-the-science emissions modeling system that estimates emissions for mobile sources and the national, county and project level for criteria air pollutants, greenhouse gases and air toxins. [www.epa.gov/moves](http://www.epa.gov/moves)

### EPA WARM
- EPA Waste Reduction Model: calculates emissions reductions for baseline and alternative waste management practices – source reduction, recycling, anaerobic digestion, combustion, composting and landfilling. [www.epa.gov/warm](http://www.epa.gov/warm)

### GHG
- Greenhouse gases are those that contribute to the greenhouse effect by absorbing infrared radiation, including carbon dioxide, methane, nitrous oxide, ozone, chlorofluorocarbons and hydrofluorocarbons.

### GPC
- Global Protocol for Community-Scale Emissions: developed by the World Resources Institute, C40 Cities Climate Leadership Group and ICLEI to ensure consistent and transparent measurement of greenhouse gas emissions between cities. [www.ghgprotocol.org](http://www.ghgprotocol.org)

### GWP
- Global Warming Potential: a factor describing the radiative forcing impact of one unit of a given GHG relative to one unit of CO2. These are calculated and reported by the IPCC.
## GLOSSARY

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Home Energy Labeling</strong></td>
<td>Home Energy Labels estimate a home’s energy consumption and provide recommendations on cost-effective improvements</td>
</tr>
<tr>
<td><strong>Home Energy Score (HES)</strong></td>
<td>Developed by the US Department of Energy and its national laboratories, the HES provides home owners, buyers and renters directly comparable and credible information about a home’s energy use. Similar to a miles-per-gallon rating for a car.</td>
</tr>
<tr>
<td><strong>ICLEI</strong></td>
<td>ICLEI – Local Governments for Sustainability: a global network of more than 1,750 local and regional governments committed to building a sustainable future. ICLEI developed the USCP and partnered with the World Resources Institute and C40 Cities Climate Leadership Group to produce the GPC. <a href="http://www.iclei.org">www.iclei.org</a></td>
</tr>
<tr>
<td><strong>IECC</strong></td>
<td>International Energy Conservation Code: a building code created by the International code council and updated every three years.</td>
</tr>
<tr>
<td><strong>IPCC</strong></td>
<td>Intergovernmental Panel on Climate Change: an intergovernmental body of the United Nations dedicated to providing the world with an objective, scientific view of climate change, its natural, political and economic impacts and risks, and possible response options. <a href="http://www.ipcc.ch">www.ipcc.ch</a></td>
</tr>
<tr>
<td><strong>kWh</strong></td>
<td>Kilowatt-hour: a measure of electrical energy equivalent to power consumption of 1,000 watts for 1 hour.</td>
</tr>
<tr>
<td><strong>LPEA</strong></td>
<td>La Plata Electric Association: electric cooperative serving Durango and the surrounding area. <a href="http://www.lpea.com">www.lpea.com</a></td>
</tr>
<tr>
<td><strong>MMBTu</strong></td>
<td>Millions of Metric British Thermal Units</td>
</tr>
<tr>
<td><strong>Municipal Emissions</strong></td>
<td>Emissions occurring as a result of local government operations.</td>
</tr>
<tr>
<td><strong>MWh</strong></td>
<td>Megawatt-hour: a measure of electrical energy equal to 1,000 kilowatt-hours</td>
</tr>
<tr>
<td><strong>SAP</strong></td>
<td>Sustainability Action Plan: the City of Durango Municipal Sustainability Action Plan was adopted by Durango City Council in 2015.</td>
</tr>
<tr>
<td><strong>SRWRF</strong></td>
<td>Santa Rita Water Reclamation Facility</td>
</tr>
<tr>
<td><strong>USCP</strong></td>
<td>US Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions: developed by ICLEI, the USCP is a detailed document with cutting-edge methodologies and best practices to help US local governments measure and report the emissions associated with their communities.</td>
</tr>
<tr>
<td><strong>VMT</strong></td>
<td>Vehicle Miles Traveled: a measure of the total amount of travel for all vehicles in a geographic region over a given period of time.</td>
</tr>
</tbody>
</table>