2018 ENVIRONMENTAL REPORT

Colorado Springs Utilities
It's how we're all connected
Our highlights

Environmental stewardship has been a part of our business practice for decades. Our customers and community rely on us to meet their utility needs, and they also expect us to responsibly manage the environmental impact of their energy and water services. We’re working to protect our air, water and natural resources now and for future generations.

2018 was a phenomenal year for our continued commitment to environmental stewardship.

This report highlights our proudest accomplishments in 2018, told through facts, figures and stories.

We approved plans to add 245 megawatts of solar power to our generation plus 25 megawatts of battery storage, powering approximately 95,000 homes annually.

We recycled nearly 200 tons of porcelain for use in street paving and construction projects, significantly reducing landfill waste.

We distributed thousands of free LED light bulbs to local nonprofit agencies.

Thank you for sharing our commitment to the environment. We are lucky to live in the wonderful state of Colorado, and we are all responsible to keep it beautiful.
Efficiency programs

Residential and business efficiency rebates help our customers use energy and water efficiently while decreasing waste.

In 2018, residential and business efficiency rebates saved:

- 18.9 million gallons of water
- 36,888 Mcf of natural gas
- 27,074 MWh of electricity consumption
- 4.1 MW of electricity demand

Sustainable practices

Recycling materials and waste is not only a sustainable practice that helps the environment, it’s cost-effective. Because we can reuse and recycle materials, our costs go down and we are more efficient with your dollars.

In 2018 alone, we recycled:

- 26 tons of electronic waste
- 10,126 mercury-containing lamps
- 26,321 gallons of used oil
- 660 gallons of antifreeze
- 1,299 gallons of steel, aluminum, copper, brass, iron and tin

Our facilities and fleet

We must lead by example. Reducing our own energy and water use is always a priority; we measure our progress every year.

Through our LED lighting retrofit program, we reduced energy use in our facilities by 17.1 percent. Our use of alternative fuel, electric and hybrid vehicles reduce air emissions in Colorado Springs.

In our vehicle fleet, we have:

- 34 electric/electric hybrid vehicles
- 37 compressed natural gas vehicles
- 325 ethanol flex-fuel vehicles
Renewable energy

In 2018, we took big steps forward in our commitment to renewable energy by moving forward with plans to acquire 245 megawatts of new solar generation plus battery storage to our system by 2024.

Grazing Yak Project
Online 2019
35 megawatts

Palmer Solar Project
Target 2019
60 megawatts

Approved Project
Target 2023
150 megawatts

In addition, a 25 megawatt battery storage system will come online in 2023. Currently, it is the largest energy storage system announcement in the state of Colorado, powering upwards of 30,000 homes with stored solar energy.

More than 95,000 homes will be powered annually by carbon-free energy when all of these renewable projects are online.

“We are changing the way we power the Pikes Peak region and are on a path to reduce our carbon emissions by 40 percent or more from 2005 to 2035,” said CEO Aram Benyamin.
As we integrate more solar energy into our grid in the coming years, some may ask, “How is power generated on cloudy days? Will the community lose power?”

To ensure power quality and reliability, our grid operators work tirelessly so that our power system works as a whole. When power generation fluctuates from renewable sources, like solar, we are fortunate to have a resource we can depend on. It’s called the Front Range Power Plant.

**Front Range generated more than 2.5 million megawatt hours of energy throughout the year. On Nov. 11, 2018, we broke the all-time one-day-generation record: 11,315 megawatt hours.**

There are many reasons why this plant is a critical asset for our customers now, and will become increasingly important as we continue to add renewables to our portfolio.

Front Range Power Plant is:

- **Flexible:** It can be ramped up to maximum output and then turned back off within a few hours. For example, if we have 100 megawatts of solar but clouds roll in causing us to quickly lose 50 of those megawatts, this plant can make that up in less than five minutes.

- **Efficient:** Because of automation and the combustion turbines, this plant requires less staff to operate. Front Range only has about 20 employees.

- **Cost-effective:** When we produce energy and customers don’t need it, we sell it on the market and make a profit, which in turn keeps rates lower for our customers. The cost to run this plant is very low considering the price of natural gas and the megawatts of energy we produce with it – a lot for a little. It can generate more power than Nixon and Drake power plants and our hydro power plants combined.

Relying more on Front Range is beneficial to our customers in almost every way. It helps us meet many of our customers’ diverse needs when it comes to flexibility, efficiency, reliability, cost and environmental stewardship.
Wildlife protection

Soft, sleepy groans come from a sedated bear cub. He’s on a sled in the snow, being pulled along like a child in a snowsuit, except his snowsuit is all fur and blubber.

He is an orphaned black bear cub, one of seven that were rehabilitated in 2017 after losing their mothers. The mother bears’ stories are sad, but luckily their cubs get another chance at living in the wild.

Through a partnership with Colorado Parks and Wildlife (CPW), we find remote locations on our watershed to build dens for these cubs. They were transported from Wet Mountain Wildlife Rehabilitation to these undisclosed locations in January 2018.

After carefully unloading the cubs from a trailer onto sleds, CPW officers and volunteers pulled the cubs into the snowy forest to their new, human-made dens. Officers un-tied their paws, took covers off their eyes, transferred them to smaller sleds and placed them in the den. The officers crawled in after them, making sure to position them comfortably to ensure breathing and maximum snuggling.

We are privileged to live in this beautiful place, and we each must do our part to protect it. As your community-owned utility, we strive to protect the environment and wildlife that make Colorado Springs an amazing place to live. Long-term partnerships with organizations like CPW, the US Forest Service and others help all of us work together to preserve Colorado’s beauty.
Air quality in Colorado Springs is among the best of all the cities in Colorado, and we do our part to keep it that way.

For decades, we have worked with the State of Colorado to consider the effects of population growth, energy production and increased transportation on air quality in the Pikes Peak region. Our air quality is continuously monitored by the Colorado Department of Public Health and Environment using procedures and equipment that are approved by the Environmental Protection Agency.

Our emissions today are lower than ever before as we continue to shift electric generation to natural gas and renewable sources.

**We are proud to say that in 2018 our drinking water continued to meet or surpass all state and federal drinking water standards.**

Most of our water comes directly from high-country snow melt, which means we are primarily first-time users of the water.

We take water quality very seriously. Our laboratory is state certified with state-of-the art instrumentation. In support of regulatory compliance, we operate 365 days a year, collecting and analyzing more than 12,000 samples annually. Our laboratory staff monitors drinking water for quality, conducting 400 tests per month. We know that each time you turn on your tap, the quality is what matters most.
Visit csu.org to learn more about our environmental efforts.