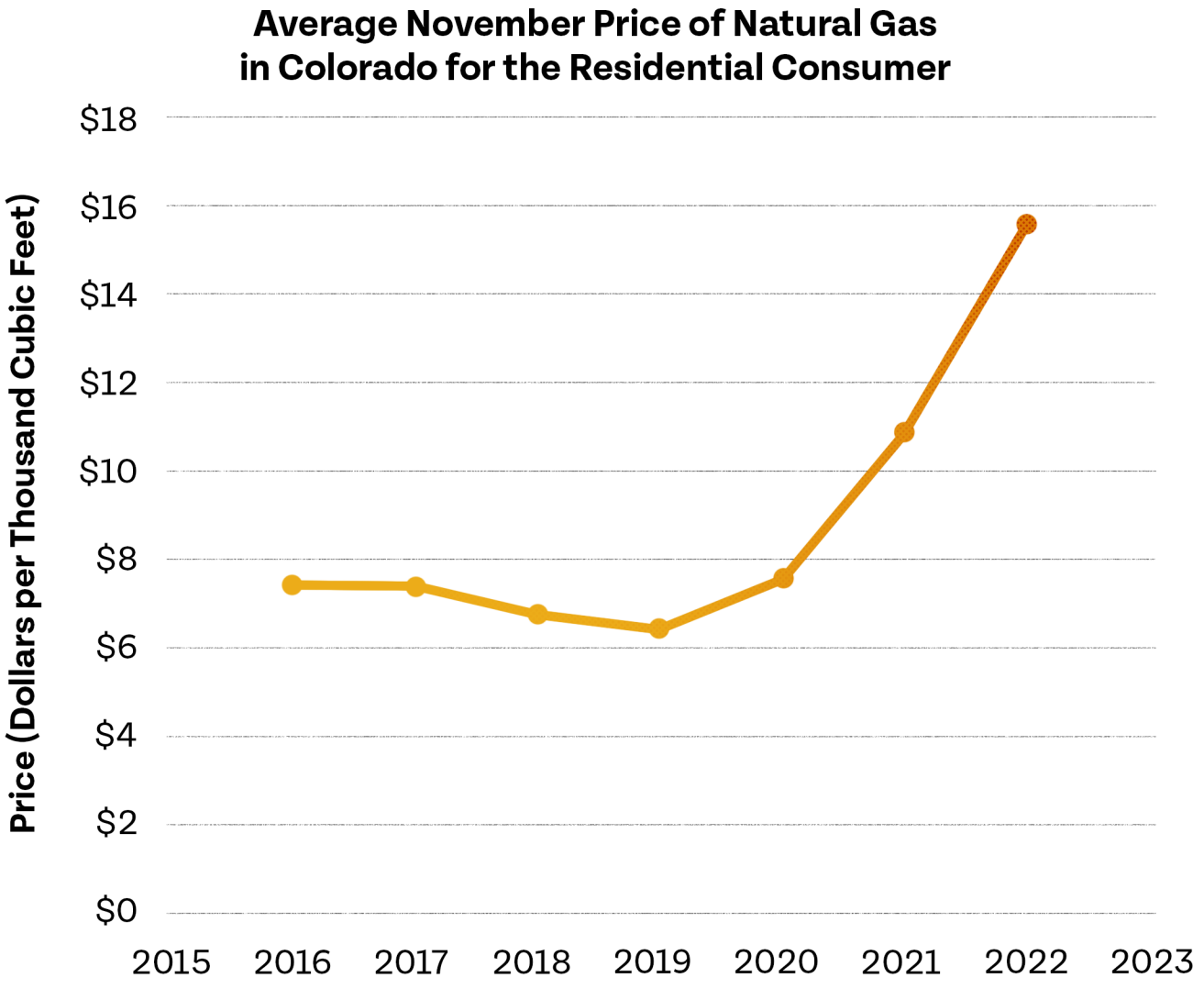
IN THE KNOW: ENERGY COSTS

Energy is central to our lives. But the cost of energy can have profound impacts on housing and food security, health, and well-being. ***In November and December of 2022, Colorado residents experienced shocking increases in their energy bills. For some, costs were almost double from the previous year.***

Consumers who rely upon Xcel Energy, the largest utility provider in Colorado, saw their electric bills increase on average 25 percent and gas bills by 75 percent compared to the same months in the previous year. This increase came as a surprise to many consumers, making it difficult to plan for the increased costs and negatively affecting their economic well-being.



Data Source: U.S. Energy Information Administration

What Causes a Price Increase?

Price fluctuations for energy come from a variety of factors, including new infrastructure, weather, and market rates of energy. According to Colorado's Public Utility Commission (PUC), there are four main factors driving the most recent increases in consumer bills:

- The wholesale cost of natural gas increasing 40 percent from Winter 2021-2022 to Winter 2022-2023 (*accounts for 36 percent of the energy cost increase).*[1]
- A 30 percent increase in gas usage due to a cold weather front (*accounts for 30 percent of the energy cost increase).*
- Increases in Xcel base rates, which are meant to cover operational costs and infrastructure costs, for both gas and electric services *(accounts for 16 percent of the energy cost increase).* The PUC is responsible for regulating and approving base rate increases. In 2022, the Public Utilities Commission (PUC) approved six base rate increases. While the base rate increases account for a relatively small percentage of recent growth in consumer costs, the rate increases are permanent.
- Recovery costs, which are the deferred provider costs incurred from Winter Storm Uri in February of 2021 *(accounts for 13 percent of the energy cost increase).*

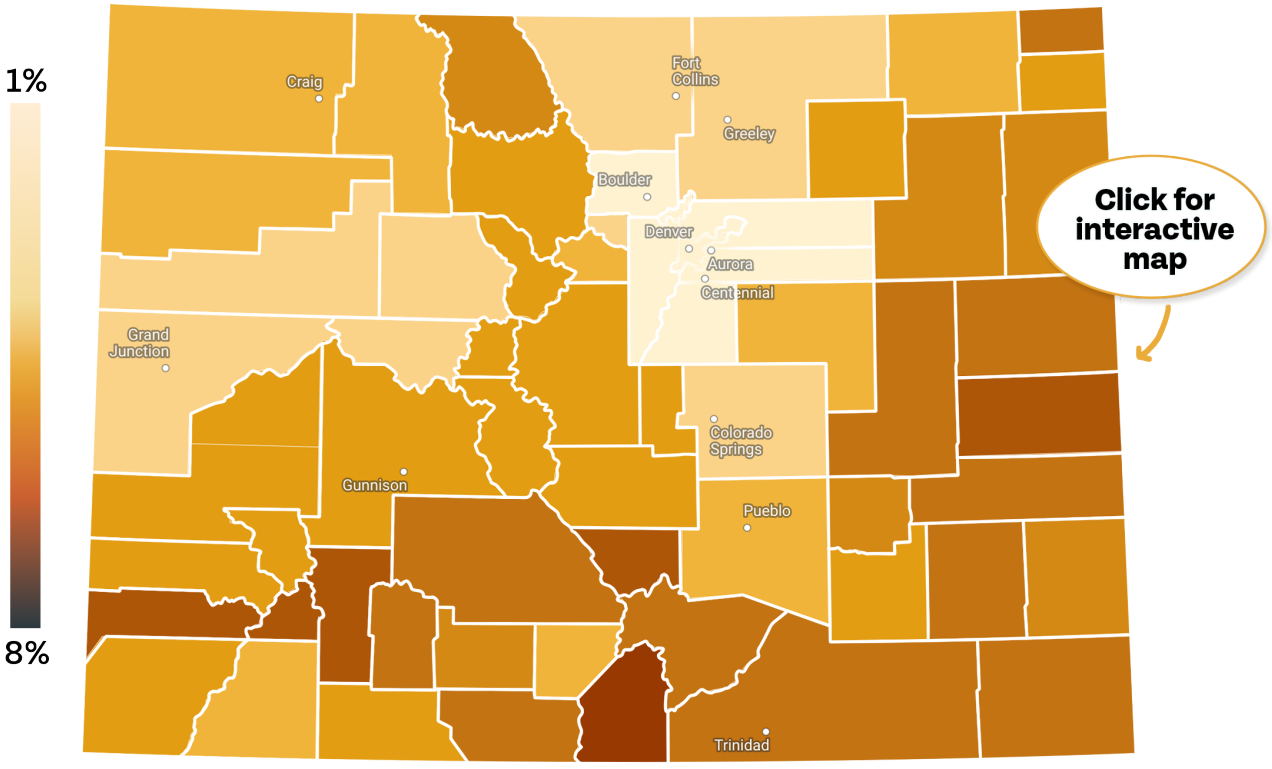
While some of the above-listed costs are out of the utility's control, like a cold weather front and consumer usage, little is done to insulate consumers from market fluctuations and infrastructure costs. The fluctuations of wholesale prices are passed on to consumers making it difficult to budget or plan for utility bills, especially when there is an unexpected increase. The PUC does consider consumers, and regulates utilities to ensure safe, reliable, and reasonably priced services. However, utility companies are only allowed to make their profit on infrastructure projects (including renewable infrastructure). The cost of an infrastructure project, plus a return on investment (or the profit), is calculated into the base rate and creates an incentive structure for utility companies to build more rather than promote efficiency. ***Notably, Xcel Energy made an increased profit in 2022. Nationally, in 2021, Xcel reported a net income of $1.597 billion and in 2022, a net income of $1.736 billion.***

Who Is Affected Most By Rising Costs?

Thirty percent of Colorado households are energy challenged, stressed, or impoverished. Colorado's average energy burden, the proportion of household income spent on energy, is 2 percent, compared to the national average of 3 percent. However, ***the energy burden varies widely, with residents in some rural regions paying upwards of 6 to 8 percent of household income on energy.*** Families with low incomes are affected the most by rising energy costs, as a larger proportion of their income goes towards utility bills.

1. As the wholesale cost of natural gas has been decreasing again, Xcel has cut consumer natural gas bills reflected in March and April 2023 bills.

Average Energy Burden (% income) for Counties in Colorado



Source: U.S. Department of Energy, Low-Income Energy Affordability Data

Making Energy More Affordable

Increasing the affordability of energy requires more stable energy sources, efficient building codes and standards, changed incentives for utility companies, and continued public assistance. Investing in renewable energy at the state level, such as relying on electricity from wind and solar, is not only more reliable, but will lower household costs in the long term[2] as well. The Colorado 2021 legislative session included bills to require electric utilities to submit clean energy plans, increased funding for clean energy project grants, and required electric utilities to plan for and move towards cleaner fuel. In 2019, a new set of appliance standards was passed to increase efficiency. Local communities can also adopt more energy efficient building codes, which would help residents save on energy costs in the long-term. Colorado has additionally started considering changing the utility business model to be performance based, which has shown to reduce average energy costs. In the short-term, however, Colorado can simultaneously continue to increase energy assistance to ensure the immediate needs of families are met.

2. With the current incentive structure, renewable generation still requires investment in infrastructure which is passed to ratepayers.

Key Context

- Sixty-six percent of Colorado homes rely on natural gas, which is subject to price volatility, to heat their homes.
- In 2021, an average December energy bill in Colorado was $166 compared to $253 in 2022. In the U.S., wholesale costs of energy, with fluctuations, were relatively stable until 2021 when a significant increase in costs occurred globally.
- Colorado was the 7th largest natural gas-producing state in 2021. Our state's high level of production and natural gas reserves may partially contribute to the lower prices of natural gas in Colorado and the lower average energy burden.
- Colorado ranks 7th among other states in total energy production. Renewable electric energy accounted for 35 percent of that production, four-fifths of which is wind power. Since 2010, the state has tripled its renewable electricity production. While Colorado is making progress, continued investments in renewable energy are needed to aid in the affordability of energy.
- In the state of Colorado, Xcel Energy has plans to transition to 80 percent renewable energy by 2030 to meet the state's renewable energy goals. This is in line with Gov. Polis' goal of achieving 100 percent renewable energy in Colorado by 2040.