Presentation to the Joint Select Committee on Rising Utility Rates

March 20, 2023 | Meera Fickling

Who is WRA?

Western Resource Advocates

- We are a conservation organization with more than 30 years experience in the Interior West.
- WRA fights climate change to sustain the environment, economy, and people of the West.
- Our team of policy experts, scientists, economists, and attorneys has a 30-year history of working where decisions are made, sweating the details, creating evidence-based solutions, and holding decision makers accountable.

Our Mission: Western Resource Advocates is dedicated to protecting the West's land, air, and water to ensure that vibrant communities exist in balance with nature.

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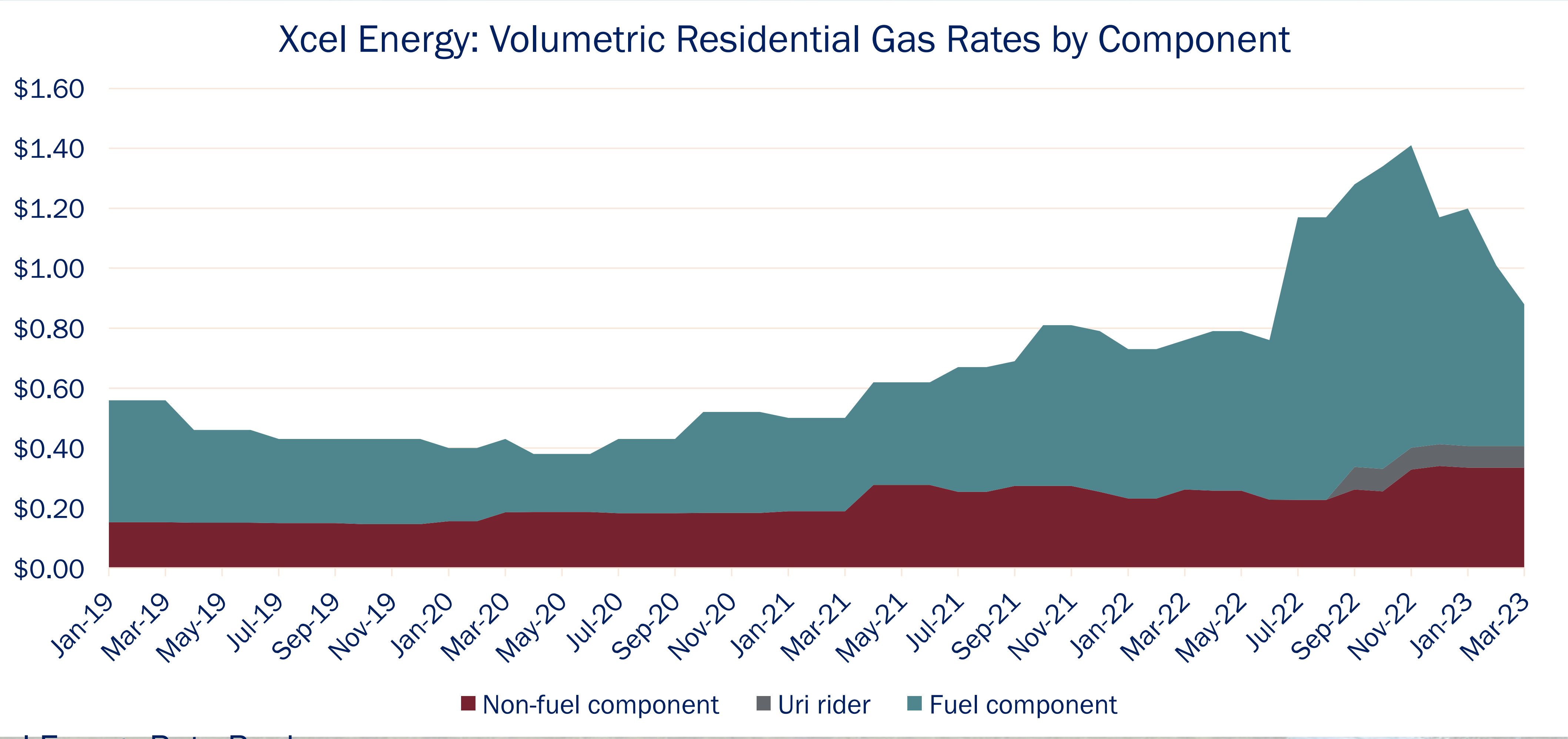
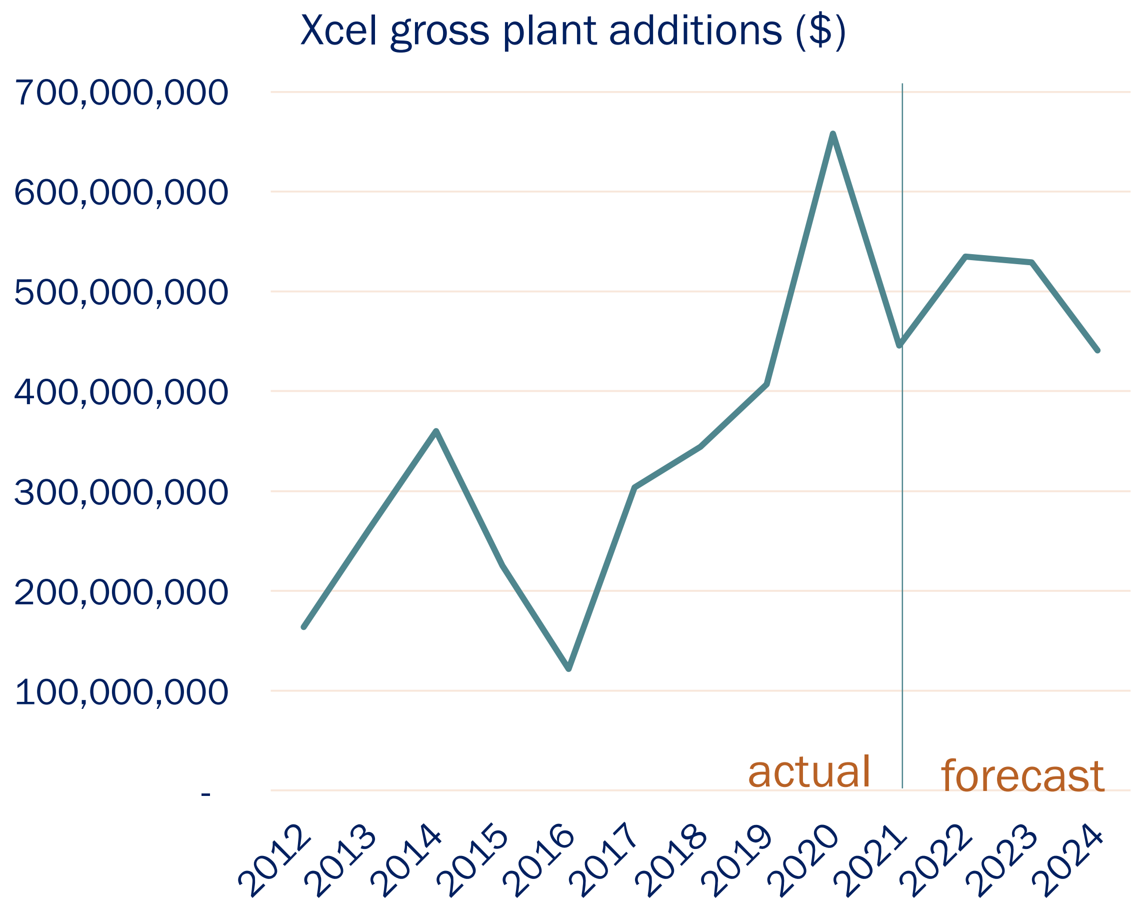
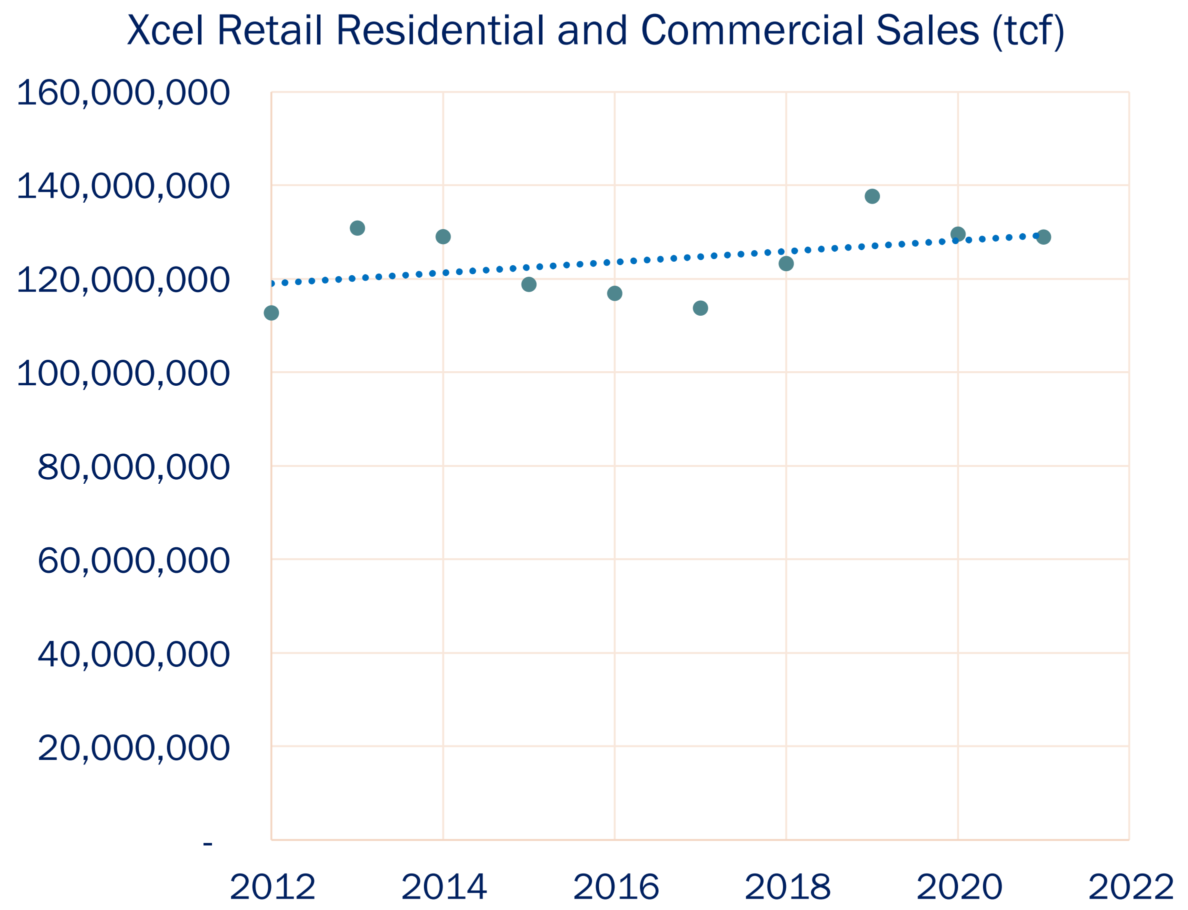
Base rates—the part of a customer's gas bill that pays for non-fuel costs, including pipelines—are increasing



Source: Xcel Energy Rate Books

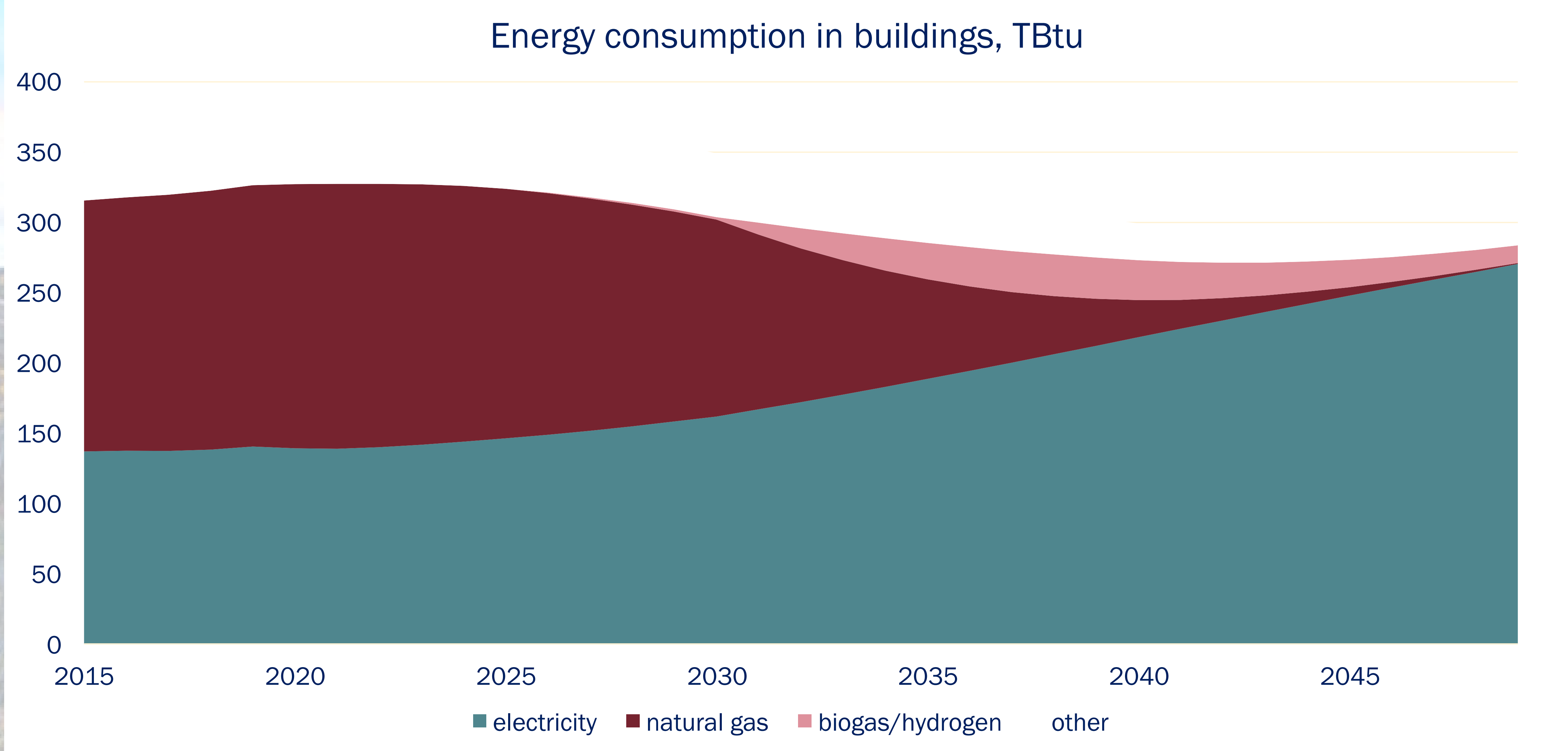
Capital investments in gas pipeline infrastructure are accelerating





Source: Xcel 2022 Gas Rate Case

Decarbonizing buildings requires reducing gas use.



Source: Colorado Greenhouse Gas Roadmap

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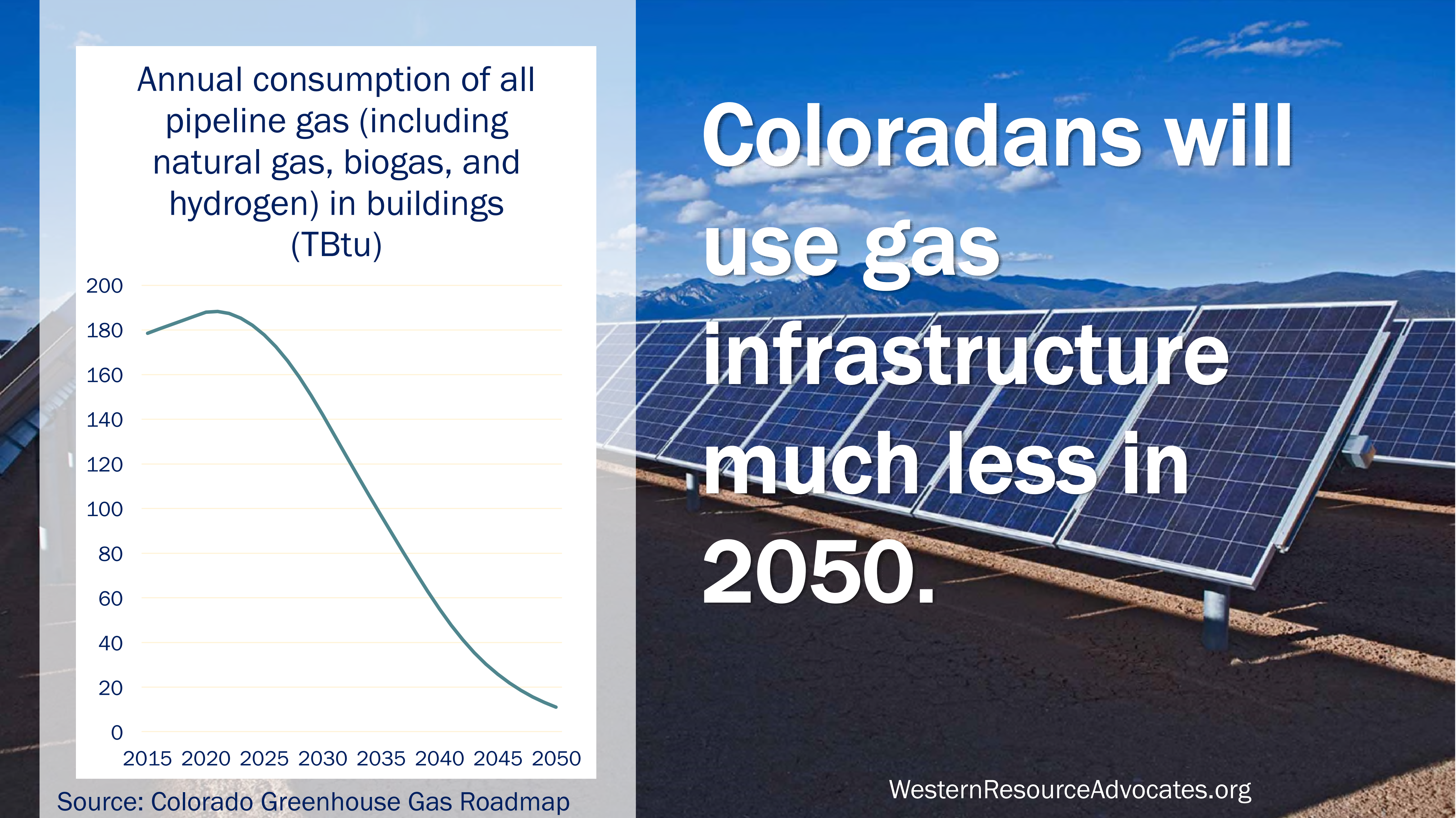

Annual consumption of all pipeline gas (including natural gas, biogas, and hydrogen) in buildings (TBtu)
200
180
160
140
120
100
80
60
40
20
0
2015 2020 2025 2030 2035 2040 2045 2050
Source: Colorado Greenhouse Gas Roadmap
Coloradans will use gas infrastructure much less in 2050.
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RNG and hydrogen potential in buildings is limited by hard physical and safety constraints.

- Using hydrogen in buildings creates major challenges and safety risks throughout the existing natural gas infrastructure system because of the difference in chemical properties between hydrogen and methane (the primary component of natural gas).

Hydrogen cannot be readily swapped for methane for use in heating or consumer appliances above a 5 to 20 percent blend with natural gas without enormous costs and disruption, and low blends achieve very few GHG emissions reductions while increasing nitrogen oxide (NOx) pollution.

Image credit: Energy Innovation

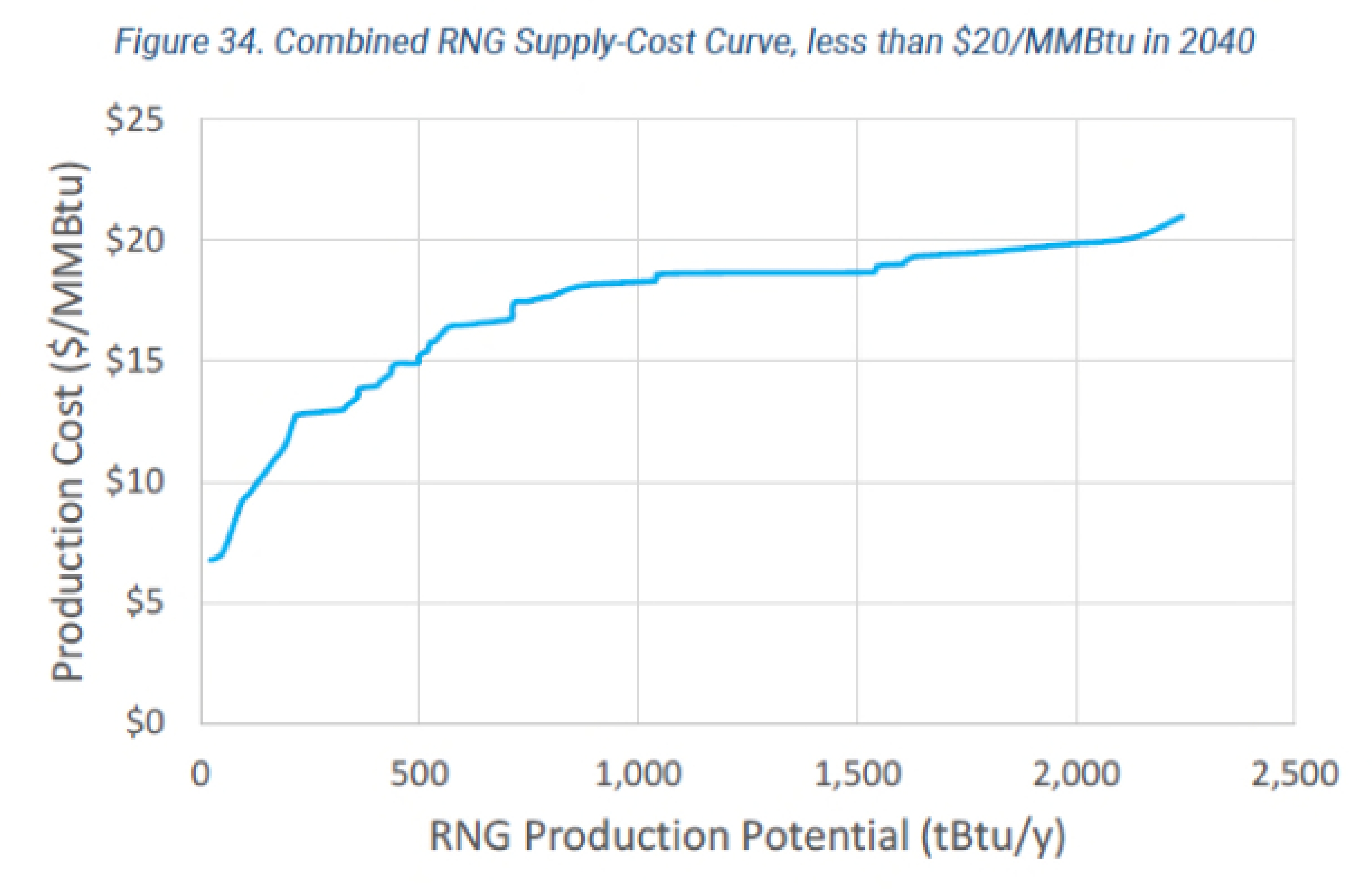

Image credit: ICF International/American Gas Foundation

RNG and hydrogen are both anticipated to cost several times today's wholesale price of natural gas—now and in the future.

The gas utilities' investment model relies on continued growth.

Xcel invested $394 million in new business and capacity from 2019-2022: requires **$49 million** revenue in 2023.

46,488 new customers added from 2019-2022 provide only **$25 million** annual revenue– a shortfall of **nearly 50%.**

To pay off the 2019-2022 investments, Xcel requires **64,613 more customers** to join the system in the future.

What if the number of customers doesn't grow, but rather stagnates or declines?

"If [customers] put in a ground source heat pump like in year five, we could be in big trouble."

-Xcel Energy hearing testimony before the Public Utilities Commission, August 26, 2022.

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Source: Xcel 2022 Gas Rate Case

What happens if we continue building gas lines at the same pace?

E3 Projected Rate Impacts in California from Stranded Gas Asset Value

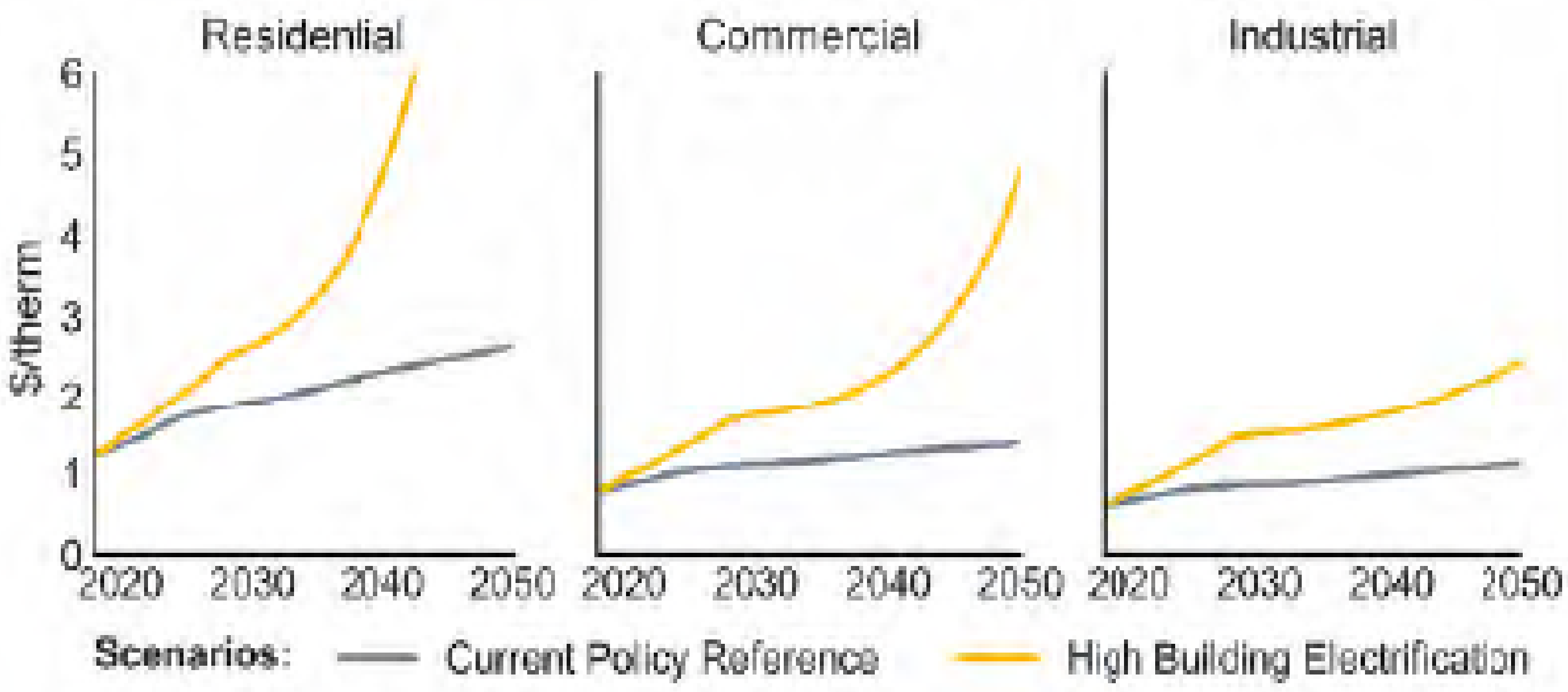

Image credit: E3

"Absent policy intervention, the rate increases…are unlikely to be consistent with financially stable gas utilities."

- California Energy Comm'n, Energy Research & Development Division, "The Challenge of Retail Gas in California's Low-Carbon Future" at 66.

It is possible to decarbonize the gas system and keep energy affordable—but we must start today.

1. Stop incentivizing new gas system expansion or sales growth.
2. Start exploring where alternatives can provide affordable, low-carbon heating for Coloradans, in place of gas system expansions or replacements.

With a **managed** transition—including avoided gas system expansion, geotargeting of non-pipe alternatives, strategic retirements of pipelines for safety and reliability, and accelerated depreciation to pay off existing assets more quickly—the same E3 modeling study shown in the previous slide found that residential gas bills could remain relatively flat through 2050.

What is a line extension allowance (LEA)?

- A line extension allowance is a payment to a new building developer that subsidizes part of the cost of connecting to the gas (or electric) system. It pays for:
    - The on-site distribution pipeline extension within the subdivision
    - The service lateral to the building
    - The gas meter
    - The gas pressure regulator
- Existing buildings don't need LEAs because they already have this infrastructure. LEAs apply to new developments.

Gas line extension allowances support continued gas system expansion.

What infrastructure does an LEA subsidize?

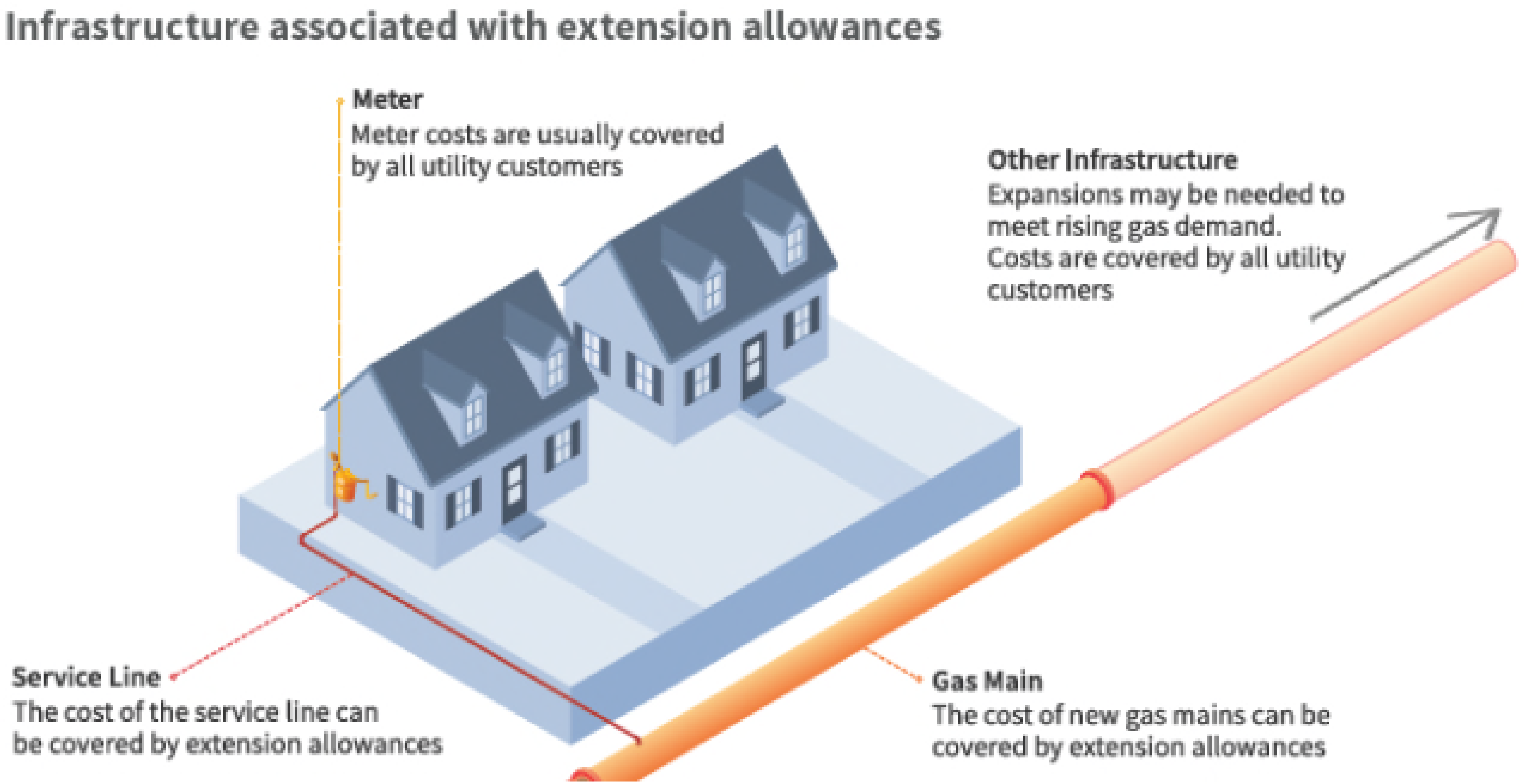

Image credit: RMI

Who pays for this infrastructure? Who benefits?

Xcel Energy

Colorado Ratepayers:

- Meter and regulator: $256*

Service lateral: $383

Distribution main: $331

Total: $970 (31%)

Building Developers:

Meter and regulator: $0*

Service lateral: $847

Distribution main: $1,337

Total: $2,184 (69%)

*until November 1, 2023
Source: Xcel Gas Modified Tariff as of Jan 2023

How does the Colorado Public Utilities Commission treat gas LEAs?

- The Colorado PUC has shown interest in reducing gas LEAs, citing the large capital costs inherent to adding new customers and LEAs' unfairness to lower income customers.
- A recent "Clean Heat Rulemaking" decision requires new applicants (developers) to bear the "full incremental cost" of their gas connection, including evaluating environmental costs.
- However, the PUC has not eliminated gas LEAs.

D. Findings and Conclusions

298. We are unpersuaded by Public Service's argument that new customers subsidize existing customers and find that the issue is more complex than is demonstrated by the Company's analysis. For instance, we question the assumption that all new customers are permanent. The assumptions made in the record in this Proceeding only hold if customers do not electrify, either in part or in whole. The Company also failed to properly account for the large capital costs associated with meeting new customer growth in terms of increases in broader system-wide and sub-regional peak design day demands. Finally, some portion of the investments in system and shared corporate services appear to result directly from new customer growth.[143] We thus question the presumption that it is correct to continue with system investment driven by customer additions simply on the basis of what has historically been done to provide service to new and existing customers. We further note that income-qualified customers are less likely to benefit from line extensions, creating an equity problem. Public Service and the intervening parties must consider what is reasonable given the shifts in the natural gas environment in the coming years.

Image Credit: Colorado Public Utilities Commission Decision C22-0642-22AL-0046G

The Colorado General Assembly should take the next step and eliminate gas LEAs

- **To meet our climate goals, we need to stop subsidizing fossil fuel connections.**
- **LEAs are regressive.** Funds flow from Colorado ratepayers (including renters and low-income Coloradans) toward building developers.
- **LEAs are not a substitute for affordable housing policy.** The amount of a residential LEA ($970) represents a fraction of a percent of the cost of a new construction single family home in Colorado.
- **Efficient, cost-effective electric heating options are available in Colorado today.** All-electric new construction saves an average of $2,100 upfront and, given today's natural gas prices, also saves money on fuel.

What else can the Colorado General Assembly require utilities to do to minimize stranded asset risk?

- In addition to **eliminating gas subsidies,** we need to explore where utilities can make geographically targeted investments in **energy efficiency, electrification, and demand response** instead of in gas pipeline infrastructure.
- The Colorado PUC recently adopted rules requiring utilities to submit **biennial gas infrastructure plans (GIPs)** that will analyze non-pipeline alternatives to some planned pipeline projects. However, utilities will analyze only a limited number of projects, and they will select the projects to analyze.
- The legislature could require utilities to analyze **all planned projects over $2 million** for non-pipeline alternatives in GIPs.

Additional complementary policies

- Support workforce development programs for the HVAC industry.
- Support investments in weatherization and energy efficiency measures, and building electrification, particularly for low-income customers and seniors on fixed incomes.