

CASR Energy Briefing

Transportation & Infrastructure (TIN) Committee

August 20, 2025

Overview

1. CASR Mission & Vision
2. Scale of the Decarbonization Challenge
3. Deep Dive: Energy & Utility Strategy Work
4. Summary & Discussion

CASR's mission embraces a solution-oriented mindset.

Our vision encourages holistic and multi-faceted solutions.

Mission

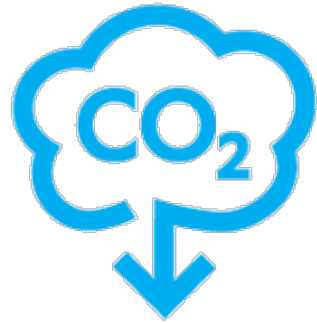
The climate crisis is solvable.

Together, we are the ones to solve it.

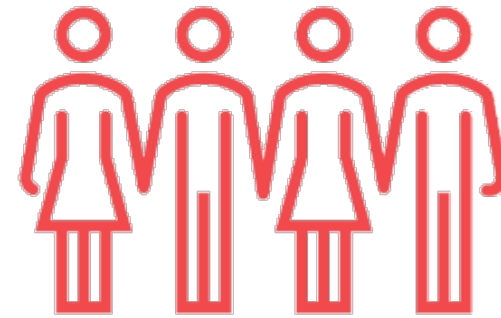
Vision

**Together, we build a carbon-pollution free,
sustainable, and climate-resilient Denver for all.**

We strive to address community problems and systemic issues with sustainable, scalable, and replicable solutions



**Decarbonize Denver
as quickly as possible**



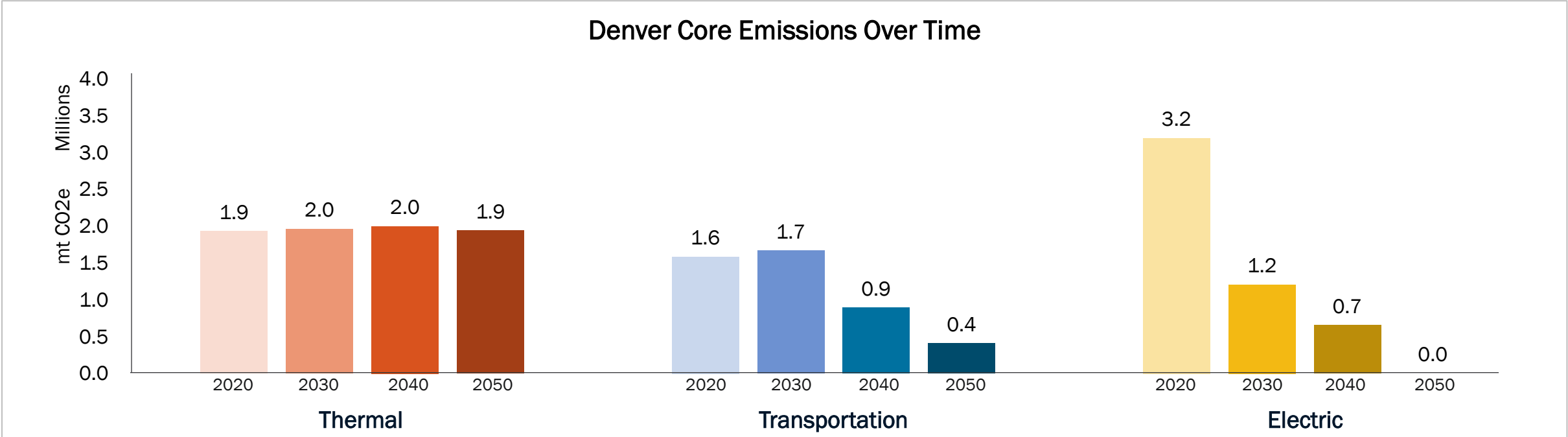
**Support climate vulnerable
communities.**

Scale of the Decarbonization Challenge

Strategies to maximize climate & community impacts

Energy and transportation are responsible for 97% of Denver’s core GHG emissions

We are attentive to the pace of decarbonization, infrastructure needs, system reliability, and the cost of solutions.



Thermal

Gas: 225,000 customers, ~\$15B scale
(Gas lines have a 60-yr depreciation)

Steam: ~100 large users, ~\$65M scale
(Major equipment due for replacement)

Transportation

~400,000 vehicles to electrify

~\$20 billion scale

(Reducing vehicle dependence helps)

Electric

Annual throughput to double. Peak management lowers cost.

(Min. \$3 billion per 5-year dist. plan)

Billions of dollars are already deployed in recurring, institutional investment.

These investments should be economically, socially, and environmentally sustainable.



Scale of Resources

- Climate Protection Fund
~\$50M annual revenue

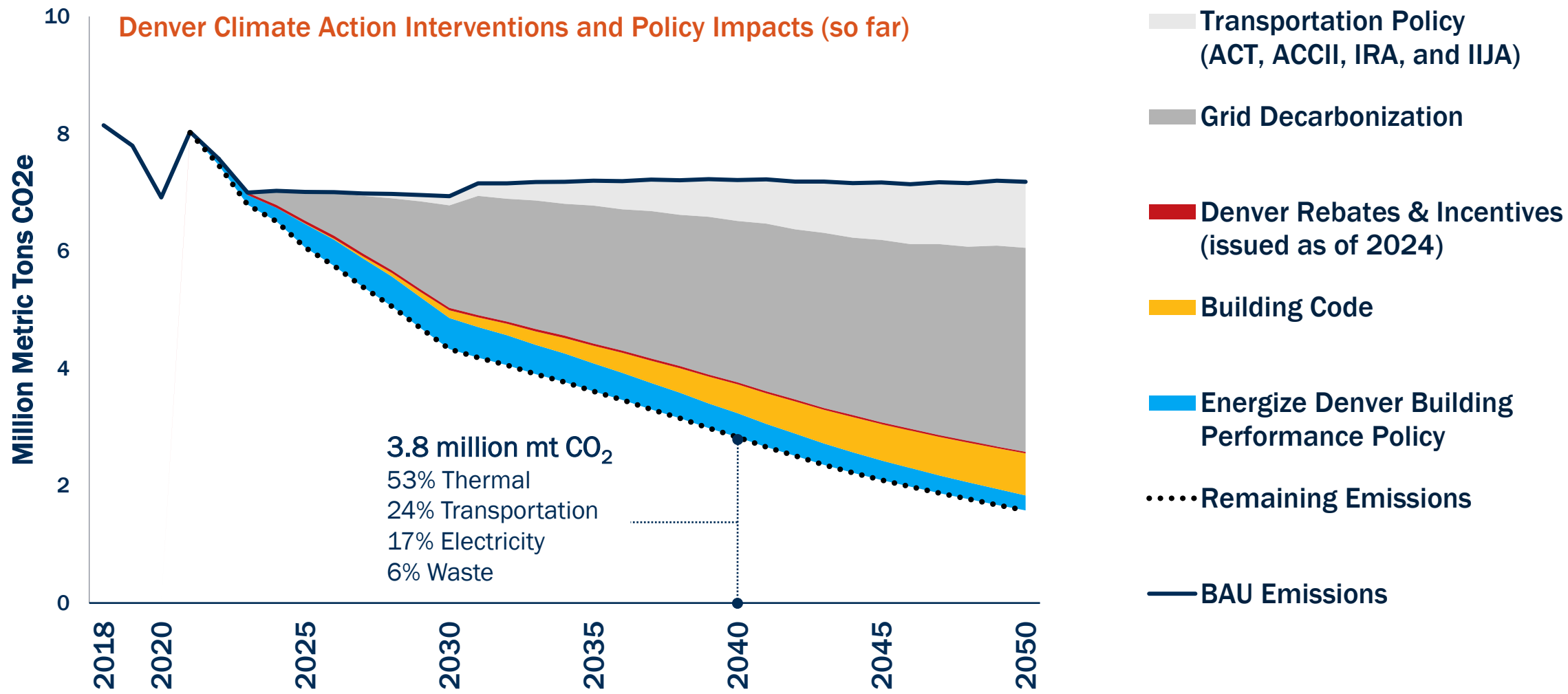


Scale of Resources in CO

- Electricity & Fossil-Gas Businesses
~\$5B annual revenue
- PUC Authorized Incentive Programs
~\$420M annual programs
- Energy Infrastructure Planning
~\$50B identified thru 2050

Policy actions and institutional investments are what move the needle.

Community programs and lead-by-example capital projects demonstrate what's possible and scalable.



Levers to Affect Change



Influence \$ billions of recurring investments.

Determines the affordability, reliability, and sustainability of the built environment.

\$38 million in 2025 rebates & incentives.

Demonstrates solutions in the community that the private sector can replicate.

\$50 million asset portfolio and growing.

Shows what's possible and enables the next generation of energy infrastructure.

The actions of others determines our success.

From individuals to institutions, everyone must believe in and pursue sustainable solutions.

Deep Dive: CASR Energy & Utility Strategy

Achieving affordable, reliable, pollution-free energy

CASR Energy Policy Vision & Focus Areas

Effect systems-level change to ensure that affordable, reliable, carbon-free energy options are available to Denver when and where they are needed.

**Affordable, reliable,
carbon-free**

**Prep for widespread
electrification**

**Sustainable thermal
alternatives**

CASR initiatives help to inform institutional action.

CASR studies and programs provide information and real-world insights.

Grid Capacity and Load Forecast Study

In an electrified Denver, how many substations will we need, and where might we put them?

Equitable Rate Reform

Reduce customer energy burdens and support the shift to non-emitting utility service.

Downtown District Thermal Network

Identify the lowest cost pathway to a carbon-free downtown, while supporting Denver's growth.

Gas Planning (HB1370) & Neighborhood Electrification

Selected as a priority community to pilot targeted projects that enable gas system decommissioning.

Insights from CASR Programs/Projects

Real-world data on clean energy technology performance, cost, and customer experience.

Enabling informed advocacy to influence Public Utilities Commission proceedings.



COLORADO

Department of
Regulatory Agencies

Public Utilities Commission



PUC oversight of utility investments

- Clean Heat Plan: \$440M (2024-27)
- Efficiency Programs: \$580M (2024-26)
- Transportation: \$264M (2024-26)
- Distribution System: \$7.5B (2025-29)
- Transmission: \$1.5B (2022-27)
- Wildfire Mitigation: \$1.9B (2025-27)
- Electric Resource Plan: \$15B (by 2030)

Examples of successful advocacy at the PUC

PUC proceedings are deliberated by many intervening stakeholders. Proceedings are cyclical, enabling iteration and advancement of the most impactful initiatives.

Electric Resource, Distribution, and Transmission Plans

- Approved plan to reduce electric emissions ~85% while keeping customer utility bills low.
- Colorado coal plants retired by 2030.
- Transmission & distribution system improvements to ensure power can be delivered where it is needed.

Quality of Service Plan

- Doubled bill credits to customers who experience poor service w/ equity bonus.
- If customer complaints exceeds 6.5 per 100 customers, Xcel incurs a \$1.1 million penalty.

Neighborhood-Scale Equitable Decarbonization Pilots

- \$10M for Denver, neighborhood-scale electrification.
- Ruby Hill thermal energy network.
- Valverde residential electrification retrofits.

Clean Heat Plan

- Nearly doubled the fraction of the Clean Heat budget dedicated to beneficial electrification and demand-side management when compared to the original proposal.
- Required at least 20% of the budget go to support incentives/programs for equity customers.
- Expanded the budget for all-electric new construction to \$32M (6x the original proposal).

Beneficial Electrification & Demand-Side Management Plan

- Combined with Clean Heat, unlocked substantial budgets for BE & efficiency over the next 4 years:
 - BE: \$75 million/yr
 - DSM/Efficiency: \$128 million/yr
- Rebates for cold-climate heat pumps, ~4x original proposal.
- Required development of a new on-bill financing option.

Xcel Energy is a highly regulated entity.

Municipalities must navigate various venues to advance community energy goals.



State Statute & Regulation

Municipal Agreements & Ordinances

Public Utilities Commission

- Utility investments and cost recovery.
- Rates, tariffs, rules & regulations.
- Certificate of Public Convenience & Necessity.
- Performance metrics and fines.
- Ratepayer funded rebate & incentive programs, bill payment assistance, etc.,
- Approval of franchise agreements.

Franchise Agreement

- PUC approved agreement between a municipality and its utility.
- Denver's = non-exclusive permission to use the right-of-way to provide service.
- Companion agreements are often voluntary and operationally focused.
- DEN Operating Agreement
- Energy & Infrastructure Agreement

Local Laws & Ordinances

- Denver reserves the right to consider local laws & ordinances that do not infringe upon PUC regulatory jurisdiction, such as:
- Data sharing & transparency on facilities located in Denver's right-of-way.
- Information to elected officials and customers on utility processes.
- Oversight of non-regulated utility services.

Summary & Discussion

CASR is committed to helping Denver achieve a socially, economically, and environmentally sustainable community.

We,

Understand and appreciate the urgency of the climate crisis;

Recognize the need to navigate challenges that under-resourced households and business face;

Have the resources and political will to act meaningfully and support the energy transition;

Intend to be global leaders whose ideas are replicated and scaled elsewhere; and

Welcome and are eager to work with and learn from our community members, elected officials, peer communities, and all other stakeholders interested in activating sustainable solutions for Denver.