

## Sector-Specific Strategies and Actions

The following sections detail the strategies and actions the City and community will need to take to help reach our carbon pollution reduction and climate resiliency goals. To reduce community and municipal greenhouse gas emissions, Columbia will have to accelerate the adoption of clean energy, reduce miles traveled in fossil fuel vehicles, phase in electric appliances, and reduce waste. Maximizing climate resilience will require ensuring the built environment can sustain people in extreme heat, through flooding, and changing ecological conditions. The City will achieve this by developing building resilience, creating climate-resilient green space, and providing community centers. This plan's actions focus on policies, programs, and infrastructure. It is expected that education and outreach actions will be developed as we implement. Some of the potential actions discussed during the plan's development are included in the introduction for each sector.

## Modeling Impact: The Wedge Analysis

The wedge analysis models the potential impact of fully implementing CAAP strategies. The wedge analysis builds on Columbia’s forecast and incorporates emissions savings associated with cleaner electricity, reductions in energy demand, efficient vehicles, solid waste management, and tree carbon sequestration. The wedge analysis suggests that if Columbia fully implements the strategies and actions of the CAAP, the community can meet its GHG reduction targets. **Specifically, the wedge analysis shows Columbia can achieve a 56% reduction in community-wide emissions from 2015 levels by 2035, and an 83% reduction by 2050.**

The wedge analysis:

- Is based on the City’s current community GHG emissions inventory.
- Is based on best estimates of what’s possible given current and anticipated technologies, policies, programs, and human behavior.
- Does not take costs of actions into consideration (i.e., assumes that the City will find and commit funding to the action).
- Accounts for interactions among strategies and actions.
- Includes consideration of future climate change impacts on heating and cooling energy use.

**Caption:** Wedge analysis of Columbia’s communitywide GHG emissions, depicting potential emission reductions from identified strategies as compared to a business-as-usual scenario (by sector).

