

# Preliminary 2035 and 2040 Decarbonization Goal Analysis

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# Background



- City Council adopted a 2045 carbon neutrality in 2020
- The Council Sustainability Committee (CSC) wanted to explore accelerating this goal
- In November 2024, the City Council approved undertaking a 2035 and 2040 decarbonization goal analysis with Cascadia Consulting Group (Cascadia)
- The aim of the analysis is to support the City Council in potentially adopting a new climate goal and to gauge the amount of climate action effort the City will need to undertake to achieve a desired goal

# Background Continued



- Cascadia has completed a preliminary analysis of potential climate year goals
- Analysis includes how regional, state and federal policies and programs can reduce greenhouse gas emissions (emissions) in Mountain View
- Second phase of analysis will incorporate local actions Mountain View can take over the next five years to stay on track to meet various climate goal years
- Anticipate presenting the second phase (local action analysis) to the CSC by the end of the year



**What is this analysis?** The Decarbonization Goal Analysis is an emission projection model used to forecast greenhouse gas emissions (emissions) through 2045 and the impacts of climate action interventions, such as policy or programs.

**How are emissions forecasted?** Emissions are projected through 2045 using the City's 2022 community emissions inventory and population/employment growth.

## Projection scenarios

- 1) Business-as-usual (BAU)**, emissions are forecasted assuming no change in climate intervention actions in the public or private sectors.
- 2) Adjusted business-as-usual (ABAU)**, considers the impacts of federal, state, or regional policies, and expected electric vehicle market trends.
- 3) Local impact analysis** will model the impact of 10 key decarbonization actions which may occur at the local level.



## Business-As-Usual

**Without federal, state, or local climate action**, Mountain View's total GHG emissions are expected to increase due to changes in Mountain View's demographics:

- Increase 60% by 2035
- Increase 81% by 2040
- Increase 103% by 2045



## Adjusted Business-As-Usual

Considering the anticipated impacts of **current key federal, state, and regional policies**, and **expected EV market trends**, Mountain View's total GHG emissions are expected to:

- Increase 17% by 2035
- Increase 5% by 2040
- Decrease 11% by 2045



## Local Impact

This part of the analysis will be undertaken in summer 2025 and will model **10 key local decarbonization actions** to consider implementing in the next five years.

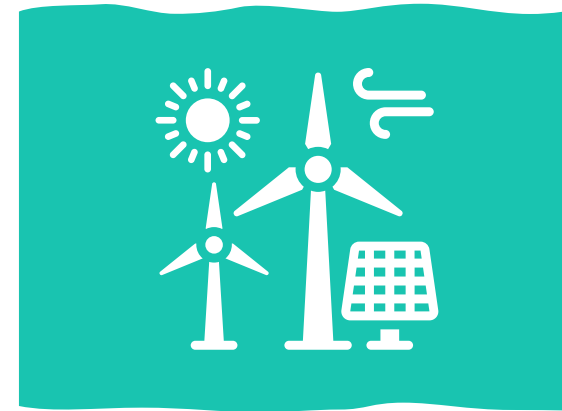
# Policies Modeled – Buildings & Energy



**SB 100 RPS:** Sets standards for clean, zero carbon energy in California’s electricity system.

**CALGreen Standards:** Green building code which would result in increased building energy efficiency in new construction.

**Bay Area Air District Building Appliance Rules:** Requires zero-emission alternatives when replacing equipment such as natural gas waters heaters and furnaces.



# Policies Modeled – Transportation



**Low Carbon Fuel Standard:** Requires a reduced carbon intensity of transportation fuels in California.

**EO N-79-20, Clean Cars – Zero Emissions by 2035:** Sets goals for percentages of in-state sales which must be zero emissions, by vehicle type.

**EV Market Trends:** Despite changes in federal and state policies mandating the sale of electric vehicles, it is expected that California's residents will continue to transition to EVs as they purchase new vehicles.

*NOTE: These trends **are** included in the ABAU forecast, but do not reflect a specific currently adopted federal, state, or regional policy.*

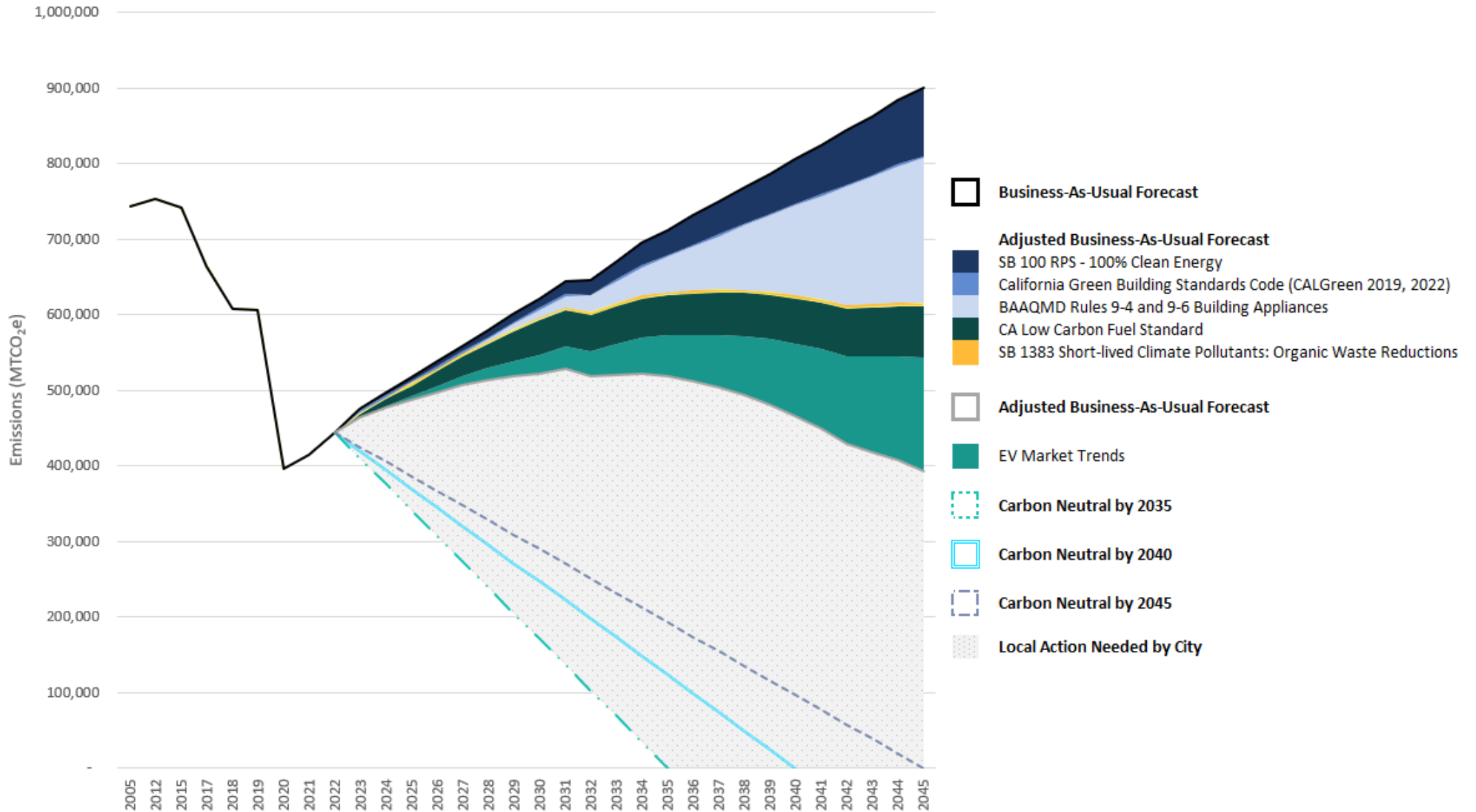




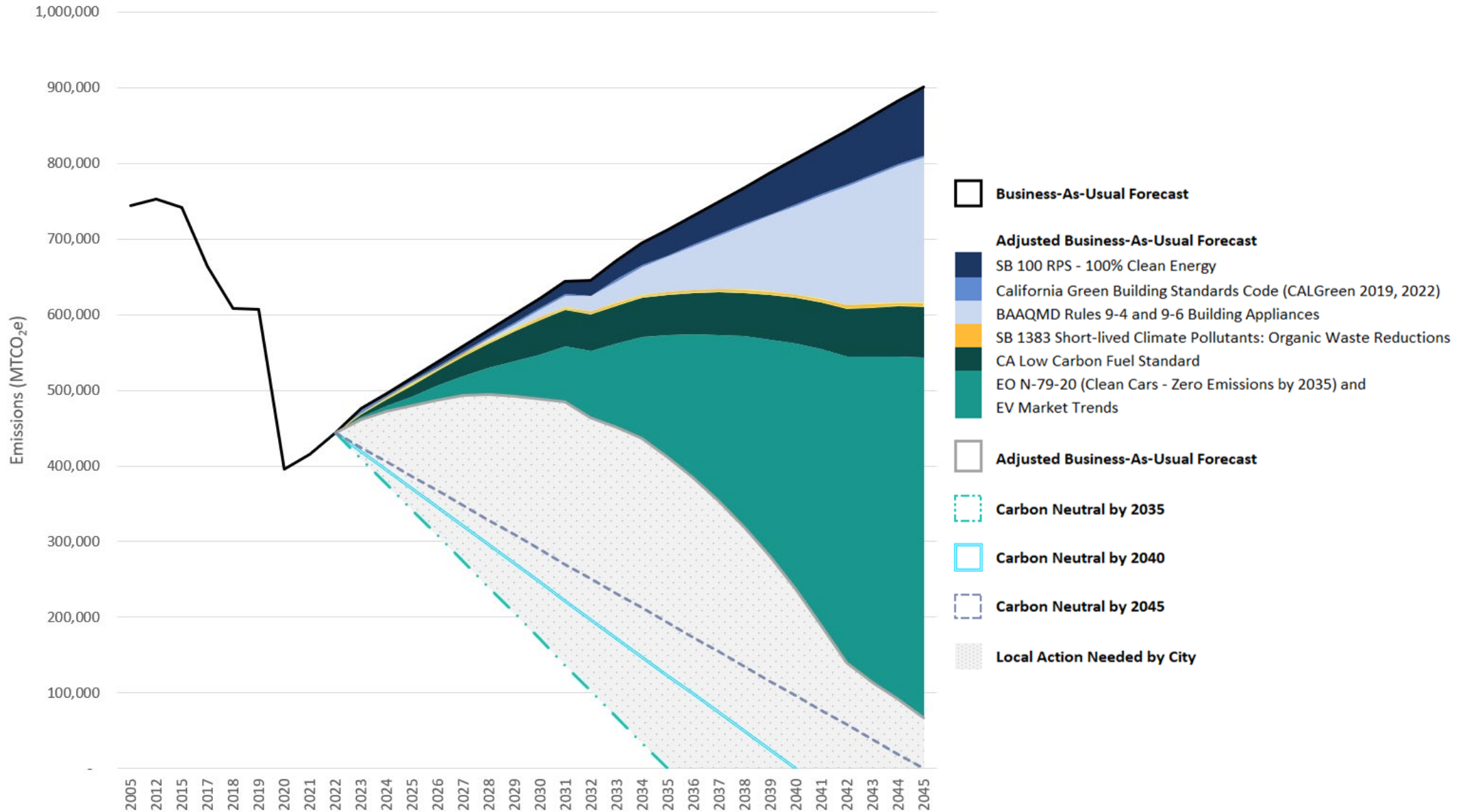
**SB 1383 – Short Lived Climate Pollutants:** Requires reductions in the disposal of organic waste tonnages in California.



# Decarbonization Goals



# Decarbonization Goals (with Clean Cars Act)



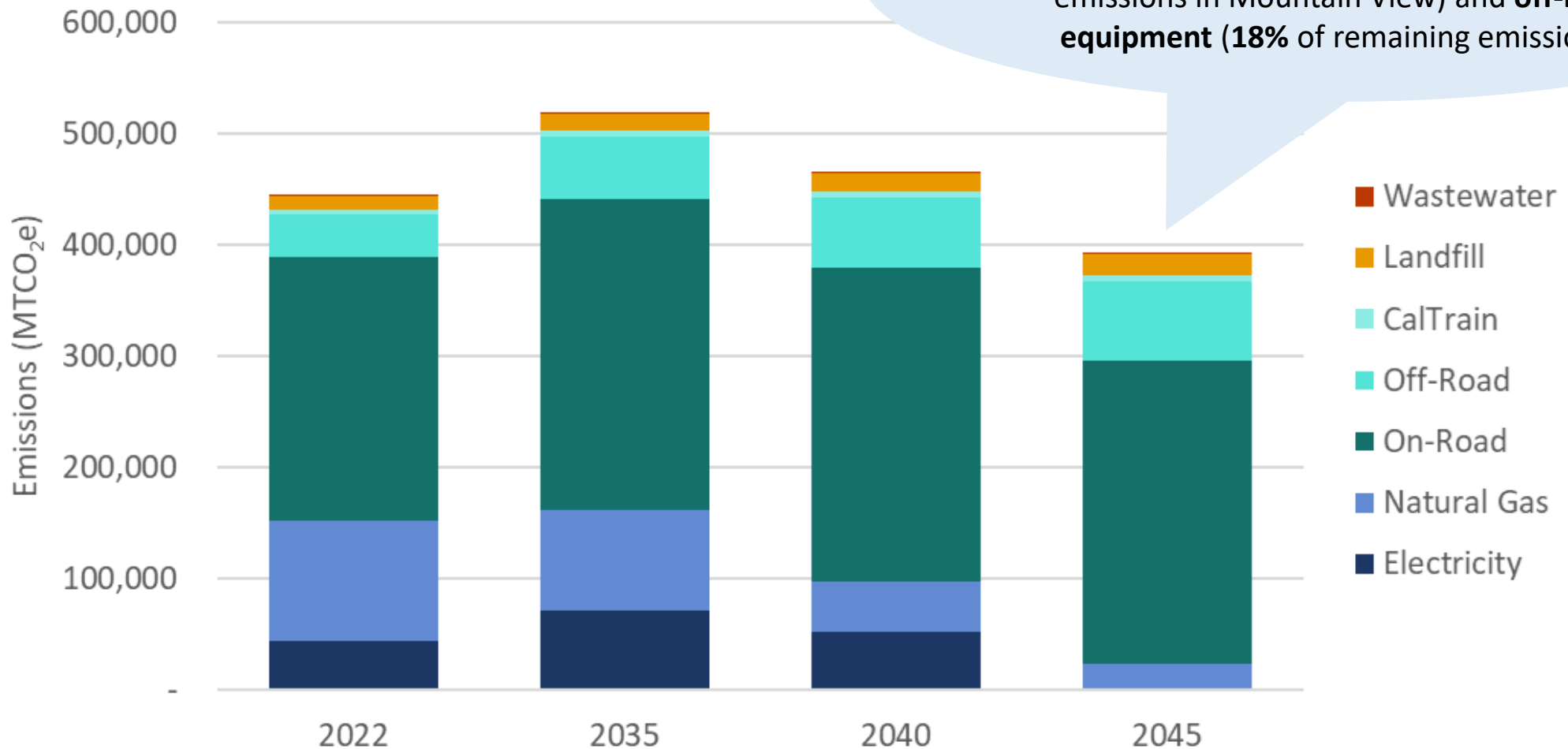
# Impact of Clean Cars Act Policy



- The Environmental Protection Agency has revoked California's ability to implement the Clean Cars Act that would have required all passenger vehicles sold in California to be electric.
- Significant impact on the decarbonization goal analysis

<b>Comparison of Emissions With and Without the Clean Cars Act</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>
Business As Usual (BAU) Emissions	712,041	805,378	900,645
Adjusted business-as-usual emissions	412,335	237,287	66,650
<b>Percent of BAU emissions the City of Mountain View would need to reduce*</b>	<b>58%</b>	<b>30%</b>	<b>7%</b>
Adjusted business-as-usual (ABAU) emissions without the Clean Cars Act and includes electric vehicle sale trends	518,083	465,797	393,320
<b>Percent of BAU emissions the City of Mountain View would need to reduce*</b>	<b>73%</b>	<b>58%</b>	<b>44%</b>

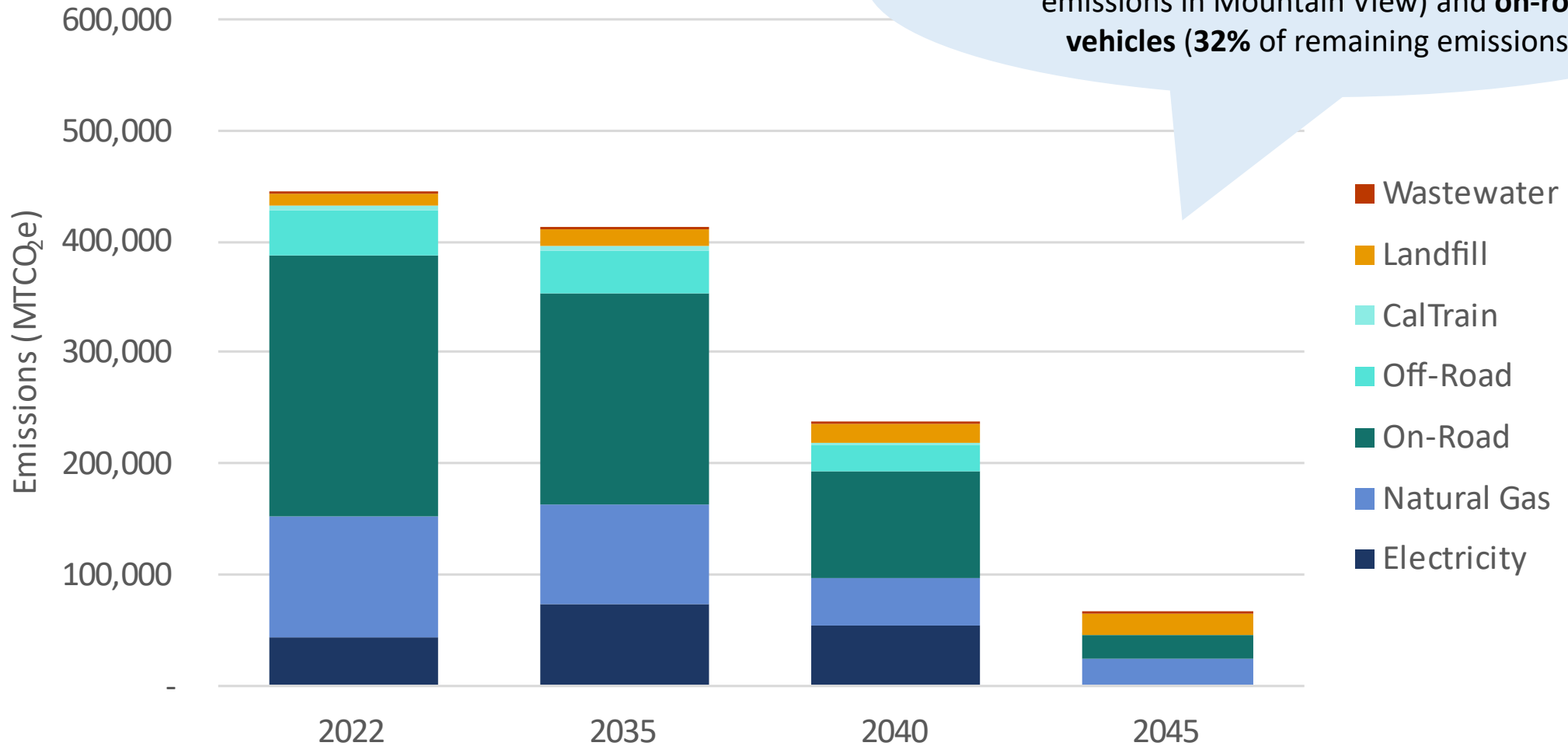
# Remaining Emissions



# Remaining Emissions (with Clean Cars Act)



The largest remaining sources of emissions by 2045 are **natural gas (36% of remaining emissions in Mountain View)** and **on-road vehicles (32% of remaining emissions)**



# Local Actions Under Consideration



- The analysis will model the expected emission reduction impacts of 10 key local decarbonization actions that will be included in the City's five-year Decarbonization Strategy.
- Actions will focus on the largest sources of emissions natural gas in buildings and passenger vehicles.

## Potential Actions for Reducing Natural Gas Emissions in Building

- Reach codes
- Time of sale requirements
- Outreach and education campaigns
- End of flow of natural gas

## Potential Actions for Reducing the Use of Gas-Powered Passenger Vehicles

- Transportation Demand Management Ordinance
- E-bike/E-scooter rebates and community share programs
- EV charging capacity
- All-electric community shuttles
- Drone delivery service

# CSC Review and Next Steps



- Early opportunity for the CSC to review the preliminary results and provide feedback if desired
- Local action analysis will be conducted over the summer and be reviewed by City staff
- Present local action analysis to the CSC by end of year



*Thank you*

