

City Manager's Office

SUBJECT:	2035 and 2040 Decarbonization Goal Analysis Update
VIA:	Audrey Seymour Ramberg, Assistant City Manager
FROM:	Rebecca Lucky, Sustainability Manager Danielle Lee, Chief Sustainability and Resiliency Officer
TO:	Council Sustainability Committee
DATE:	June 26, 2025

RECOMMENDATION

Staff recommends the Council Sustainability Committee review the preliminary 2035 and 2040 decarbonization goal analysis (Attachment 1) and provide feedback to staff.

BACKGROUND

On April 12, 2020, the City Council adopted a carbon neutrality goal for 2045. On <u>November 19, 2024</u>, the City Council approved a scope of work with Cascadia Consulting Group (Cascadia) to undertake a 2035 and 2040 decarbonization goal analysis as well as a climate vulnerability assessment (CVA). The decarbonization goal analysis and the CVA will be prepared as separate documents per the scope of work approved by the City Council. In April 2025, the Council Sustainability Committee (CSC) approved <u>the CVA framework</u>, and the staff report noted that an update on the progress for the decarbonization goal analysis would be provided to the CSC in June.

The decarbonization goal analysis will evaluate a 2035 and a 2040 decarbonization goal for potential adoption by the City Council. The first phase of this analysis provides a high-level understanding of what will happen with emissions in Mountain View based on regional, state, and national climate action efforts. It will also inform what level of effort will need to be undertaken at the local level to close the gap in emissions to meet the City's decarbonization goals.

The second phase of the analysis will evaluate 10 key actions the City can take in the next five years to stay on track to meet the City's decarbonization goal (if updated to 2035 or 2040, or the existing goal of 2045). Using this analysis of potential key actions, staff will propose a five-year plan (versus a 10- or 15-year plan) that identifies the immediate actions the City should undertake. The five-year plan will be monitored and updated over time. This planning approach

will allow the City flexibility and efficiency to respond to changes in technology, the economic market, and/or state and federal policies and programs implemented that could further reduce or increase emissions. Every five years, actions will be added, removed, or modified to address these external change factors.

The project team has completed the first phase of evaluation of the potential decarbonization goals (2035 or 2040 as well as the existing goal of 2045). This analysis evaluates the emission impacts from regional, state, and federal actions (Attachment 1) and is being presented to the CSC for discussion and feedback.

ANALYSIS

2035, 2040 and 2045 Goal Analysis and Emission Forecast

Attachment 1 provides a high-level analysis of the emission-reducing potential from regional, state, and federal policies and programs for accelerated decarbonization goals of 2035 and 2040. In addition, the analysis includes an emission forecast to 2045 based on projected population and employment growth factors in the community.

The analysis first evaluates projected emissions without climate action interventions at any level after the year 2022, known as Business-As-Usual (BAU) emissions. The BAU uses Mountain View's 2022 community greenhouse gas (GHG) inventory as the baseline for projecting emissions in future years as it was the most current data when the decarbonization analysis began in January this year. The BAU baseline includes current local policies and actions that have been implemented up to 2022, such as the establishment of Silicon Valley Clean Energy, which provides low-emission electricity to residents and businesses in Mountain View.

After the BAU emissions have been calculated, the analysis then factors in emission reductions from key regional, state, and federal actions, known as Adjusted-Business-As-Usual (ABAU) emissions. The remaining emissions left would need to be reduced through Mountain View's own policies, programs, partnerships, and projects that would be implemented at a local level.

Currently, the regional, state, and federal government policies or programs that comprise the ABAU analysis include the list below. As noted, there are challenges associated with some of these climate actions due to federal and state policy changes.

- California's 2035 Clean Cars Act (Advanced Clean Cars II regulations) that would require all new passenger vehicles sold in California to be electric starting in 2035. California Renewables Portfolio Standard (SB 100).
- Bay Area Air Quality Management District Rules 9-4 and 9-6 that would prohibit the sale of certain gas-fired equipment, such as water heaters and furnaces, in the Bay Area.

- Trends in electric vehicle sales that are expected to increase regardless of changes in federal and state policies mandating the sale of electric vehicles.
- California Renewables Portfolio Standard that requires electricity in California to be 100% zero-emissions by 2045.
- California's Low Carbon Fuel Standard that requires reducing the carbon intensity of transportation fuels 20% by 2030 through low-carbon and renewable fuel alternatives.
- California Short-Lived Climate Pollutants (SB 1383) to divert 75% of organic materials from the landfill by 2025.
- 2019 and 2022 California Green Building Standards Code to reduce building energy use. The project team is exploring including the upcoming 2025 building standards into the analysis.

There are many more regional, state, and federal policies and programs that can further reduce Mountain View's emissions, such as tax incentives, rebates, outreach, and other transportation policies. However, after careful consideration, staff selected the above policies for the ability to significantly reduce emissions in Mountain View and the availability of robust analysis of the emission-reduction potential of these individual policies.

It is important to note that for ABAU emissions, the current legislative landscape for regional, state, and federal policies is extremely volatile. Some policies included in this preliminary analysis may not ultimately be included in the final ABAU if action is taken to rescind these requirements. For example, the Environmental Protection Agency (EPA) recently revoked California's waiver authorized under the Clean Air Act allowing the state to implement the 2035 Clean Cars Act (Advanced Clean Cars II). The 2035 Clean Cars Act would have required that all passenger vehicles sold in California be electric by 2035. This single action would have reduced 326,671 MT CO₂e in Mountain View by 2045—more than half of the Business-As-Usual emissions. Without this policy, the City will be responsible for reducing a significantly higher level of emissions through local policies and programs across all potential goal years. This is particularly evident in the City's current goal year of 2045. With the Clean Cars Act, the City would have been responsible for addressing 66,650 MT CO₂e or 7% of BAU emissions in 2045. Without the legislation, the preliminary analysis now projects 542,950 MT CO₂e or 60% of BAU emissions remaining at the local level, a nearly nine-fold increase in emissions that the City will now be responsible for.

The table below provides an overview of Mountain View's emission forecast under a BAU scenario and ABAU scenario with the key regional, state, and federal policies and programs outlined above. ABAU emissions represent the MT CO₂e emissions that would need to be addressed locally through policies, programs, partnerships, and projects to meet a

decarbonization goal of 2035, 2040, or 2045. The table also shows the ABAU both with and without the emissions reductions associated with the 2035 Clean Cars Act. Staff will continue to monitor the ongoing 2035 Clean Cars Act litigation between the state of California and the EPA and will update the five-year plan accordingly if the policy is reinstated.

Federal, State, and Regional GHG Reduction Actions	2035	2040	2045
Business-as-usual (BAU) emissions: Emissions forecast based on Mountain View's 2022 GHG emissions profile, assuming no climate action (programs, policies, standards) at the local, state, or federal level.	712,041	805,378	900,645
California Clean Cars Act (EO-N-79-20)	(105,749)	(228,510)	(326,671)
Bay Area Air Quality Management District (BAAQMD) Rules 9-4 and 9-6	(46,616)	(117,396)	(192,573)
EV Market Sales Trends	(54,392)	(95,756)	(149,629)
California Renewables Portfolio Standard	(33,507)	(59 <i>,</i> 476)	(90,728)
California Low Carbon Fuel Standard	(53,772)	(60,829)	(68,022)
California Short-Lived Climate Pollutants (SB 1383)	(3,671)	(4,153)	(4,644)
California Green Building Standards Code (CALGreen 2019, 2022)	(2,000)	(1,971)	(1,729)
Emissions reduction impact of all ABAU policies	(299,706)	(568,091)	(833,995)
Percent Reduction from BAU from all ABAU policies*	42%	71%	93%
Adjusted business-as-usual (ABAU) emissions:* Emissions that would need to be reduced by local action.	412,335	237,287	66,650
Percent of BAU emissions the City of Mountain View would need to reduce*	58%	30%	7%
Adjusted business-as-usual (ABAU) emissions without the Clean Cars Act:* Emissions that would need to be reduced by local action. Percent of BAU emissions the City of Mountain View would	572,476 80%	561,553	542,950 60%
need to reduce*			

Table 1: BAU and ABAU Emission Analysis

* Sum has been rounded to the nearest whole number.

As noted during the GHG community inventory presentation to the CSC in April 2025, the largest emissions sources for the community are from fossil fuel-powered passenger vehicles and building heating equipment (hot water and space heating). To achieve any of the decarbonization goals under consideration, the City will need to enact building and transportation requirements and incentives to help the community make the decarbonization transition. More ambitious goals (earlier goal years) would necessitate more stringent requirements and significant financial incentives to accelerate the decarbonization transition.

Initial Local Actions Under Consideration to Include in the Decarbonization Goal Analysis

The next phase of the decarbonization goal analysis is to evaluate the emission reducing potential of local actions the City of Mountain View can take to meet decarbonization goals in the next five years. An actionable five-year plan will be less likely to become outdated due to changing technology, economic conditions, partnership opportunities, and state and federal government policies and programs that could reduce or increase emissions. The five-year plan will be monitored and updated over time.

The project team has begun the work of developing a local list of actions that can reduce emissions and close the emissions gap identified in the ABAU analysis. This list will incorporate guidance from the CSC and the City Council, as well as the two prior Sustainability Task Forces. In addition, it will include feedback from City departments who would be involved in developing and implementing selected actions (including Community Development, Community Services, Housing, and Public Works), as well as partner organizations such as Silicon Valley Clean Energy and Carbon-Free Mountain View.

Some of the local actions that have already been identified for consideration include:

- 1. End of flow of natural gas by 2045. This is included in the Council Work Plan Priorities for Fiscal Years 2025-27.
- 2. Reach Codes or other policy mechanisms (e.g., zoning incentives) for existing buildings to electrify equipment. Staff is exploring accelerating the adoption of reach codes this year due to the potential impacts of AB 306 that would impose a moratorium on the adoption or modification of new state and local building standards affecting residential units from June 1, 2025 to June 1, 2031. The intention of AB 306 is to address the housing crisis and to support the rebuilding of communities that were impacted by wildfires earlier this year. Existing reach codes that have been previously adopted before October 1, 2025 may not be impacted by AB 306.
- 3. Time of sale requirements for building electrification. Berkeley has implemented a new program that requires sellers and buyers to fund a \$5,000 escrow account for the buyer to make sustainable home improvements within three years of purchase.
- 4. Outreach campaigns to encourage electrification of buildings and vehicles using programs, including incentives such as rebates, in partnership with Silicon Valley Clean Energy.
- 5. Multi-family electric vehicle charging capacity at existing properties. Staff will be presenting further information and policy and program options to the CSC in Q3 2025.
- 6. Transportation Demand Management Ordinance.

- 7. All-electric community shuttles.
- 8. E-Bike and E-Scooter rebates.
- 9. E-Bike and E-Scooter community share program.
- 10. Using robotic equipment, such as drones, for delivery services. The City of Sunnyvale is currently piloting a drone delivery program, and the City of Mountain View is exploring potential policies related to drone delivery. There has also been a pilot program using electric off-road robots (personal delivery devices) to deliver goods to business and residents.

NEXT STEPS

Over the summer, the project team will continue to vet the actions above to refine, modify, or replace them with greater GHG emission reduction local actions. Upon completion of the local actions analysis in the fall, the project team will return to the CSC to present the local actions that would need to be enacted for the various decarbonization goal years and request feedback and a goal year recommendation from the CSC for City Council consideration. Staff will also begin assessing costs and financing strategies to achieve these goals. The final decarbonization analysis and, if recommended by the CSC, modification of the City's decarbonization goal year (Decarbonization Strategy) will be presented to the City Council in Q1 2026.

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Attachment: 1. City of Mountain View 2035 and 2040 Decarbonization Goal Analysis