



MEMORANDUM

DATE: July 16, 2024
TO: Paul Buddenhagen, City Manager
FROM: Mohamed Alaoui, Public Works Director
SUBJECT: **Climate Action Plan Update**

BACKGROUND

Emeryville's Climate Action Plan (CAP) 2.0, approved in November 2016, includes goals for reducing greenhouse gas emissions (GHGs) both at the community-wide level and for City operations, 40% by 2030 and 80% by 2050. These goals build on the first target, in the City's 2008 CAP, of a 25% reduction over baseline by 2020.

In addition to the GHG reduction targets, CAP 2.0 includes a hazard vulnerability assessment, an implementation plan, and both a climate mitigation action plan and an adaptation action plan for 2030.

Emeryville is a member of the Global Covenant of Mayors (formerly the Compact of Mayors) in support of the Paris Climate Accords. As a member of this group, we have committed to reporting our GHG emissions to the Carbon Disclosure Project (CDP), a nonprofit entity that runs a global GHG disclosure platform. For the first time in 2019, the CDP released a list of cities that achieved an "A" grade on climate action progress; this grade was earned by only 43 of the nearly 600 cities reporting. Emeryville was among the 7% of cities achieving an "A" demonstrating climate leadership and action in that inaugural CDP report. Since 2019, Emeryville has consistently received an A or A-.

The last CAP update was provided to the City Council in 2019 and included GHG emissions data through 2017. This presentation includes emissions data through 2022, the most recent year for which complete data are available.

DISCUSSION

CAP Implementation Actions

Emeryville has been making good progress on its CAP implementation actions, which were included as an appendix to the CAP 2.0. These actions were aimed at achieving the 40% GHG reduction goal for 2030. As of 2024, the City is currently eight years into this effort and on track to complete all relevant climate implementation actions in the plan by 2030. As of now, 77 out of the 140 CAP implementation actions are either completed or in progress, and 5 of the actions are no longer applicable. It is important to note that these CAP implementation actions were conceived in 2016, and are only a subset of the actions that Emeryville has taken since then to promote sustainability and reduce greenhouse gas emissions.

Total Emissions

Emeryville's GHG emissions data are divided by sector. The five sectors that City staff track are energy, on-road transportation, BART, off-road vehicles, and waste. From 2005 to 2022, there has been a 30% decrease in total GHG emissions (expressed in metric tons of carbon dioxide equivalent emissions (MT CO_{2e})) from 215,997 metric tons in 2005 to 149,675 metric tons in 2022.

Per-Capita Emissions

Between 2005 and 2022, Emeryville experienced roughly a 61% increase in its residential population. With this additional population, the 30% overall reduction translates to a 57% decrease in GHG emissions on a residential per-capita basis, from 27.004 to 11.593 MTCO_{2e}.

It is also important to consider the per-capita emissions for the employee plus resident population (the number of residents plus the number of jobs in Emeryville). On this basis, there has been a 43% decrease in GHG emissions, from 7.635 to 4.304 MTCO_{2e} between 2005 and 2022.

Transportation

The transportation sector has consistently been Emeryville's largest source of emissions and is a sector where the City has been making significant strides. Between 2005 and 2022, there has been a 21% decrease in on-road transportation emissions. This decrease in emissions can be attributed to a number of transportation-related actions that Emeryville has taken over the past few years.

Electric Vehicle (EV) adoption and investment in EV infrastructure is one area in which Emeryville has made significant progress. Emeryville is in the process of electrifying its municipal fleet. Public Works recently purchased five electric pickup trucks, and the City Council has approved the purchase of four more. As a result, the Public Works Department regular truck fleet is almost 100% electrified. The Police Department has purchased four electric vehicles and is working towards deepening the electric vehicle pool. Additionally, the city installed nine new EV chargers at the Police Department, City Hall, and the Corp Yard to serve the new EVs that were put into operation.

In addition to investment in EVs and EV infrastructure, Emeryville has done a lot of work on active transportation, offering people more safe and enjoyable ways to get around without a car. Emeryville's Sustainable Streetscape project was recently awarded to Bay Cities Paving under a contract in the amount of six million dollars. This represents the largest paving project in Emeryville's history and includes the installation of protected bike lanes on Shellmound Street, and pedestrian/transit improvements on Hollis Street. The Quiet Zone Project also installed new protected bike lanes on Shellmound Street which extend from 65th street to the northern Emeryville border. Currently, the city is working on the 40th Street Redesign which will include dedicated transit and bike lanes extending

from the Oakland border to Emeryville's commercial core at the Shellmound and Christie intersection.

Emeryville has also worked extensively with private development to improve its active transportation infrastructure. This includes recently built protected bike lanes on Horton Street from 45th to 53rd street. It also includes conditions of approval on entitled projects which requires the installation of protected bike lanes north of 53rd Street to 62nd Street on Horton street, and a cycle track with transit lanes in Emeryville's commercial core called the Emeryville Loop project.

Furthermore, Emeryville published its Active Transportation Plan in 2023, and the plan proposes over 16 miles of additional bike paths, increasing Emeryville's total bike path mileage by 145%. Emeryville has also been investing in shared electric scooters and bikes, and a recent agreement with Lyft bikes was entered into to deploy 55 docked electric bicycles and three new bikeshare stations in Emeryville.

Energy

After the transportation sector, the energy sector is the second largest source of emissions in Emeryville, and another area where the city has made significant progress. From 2005 to 2022, emissions from the energy sector decreased 34%. Energy emissions are calculated using both energy usage and a measure of how clean the energy itself is, called the 'emissions factor.' Some of the progress in the energy sector can be attributed to a reduction in energy usage, and some can be attributed to the decreasing GHG intensity of Emeryville's electric power mix.

Emeryville's power mix changed when the city joined Ava Community Energy (formerly known as East Bay Community Energy) in 2018. Customers were originally placed on Ava's Bright Choice service, which initially had lower emissions than the PG&E power. Subsequently, a decision by the Ava Board to not use nuclear power led to an increase in the Bright Choice emissions factor in 2020. In March 2022, the City Council voted to set the default electricity option for Emeryville residents and businesses to Ava's 'Renewable 100' service, starting in October 2022. The Renewable 100 service is fully sourced from California wind and solar facilities, meaning it is completely GHG-free. This transition will likely lead to a significant reduction in Emeryville's GHG emissions from electricity. Since the change in October 2022, the impact can already be seen in the 2022 data but will become more apparent in 2023 data.

Emissions from electricity usage will go down with cleaner energy sources, but emissions from natural gas will always stay the same. Because of this, it is important to focus on electrification. Emeryville has already taken many actions towards electrification, including electrifying its municipal fleet, enacting a gas-powered leaf blower ban and purchasing electric leaf blowers for the Public Works Maintenance team, and working with regional agencies like StopWaste and BayRen to promote energy efficiency rebates and incentive programs.

Summary

Emeryville has made significant progress with both its GHG reduction goals and its CAP implementation actions. The city continues to prioritize sustainability with direction from the Sustainability Committee, and City Council, and these efforts are shown through the data.

FISCAL IMPACT

There is no fiscal impact associated with this status report.

STAFF COMMUNICATION WITH THE PUBLIC

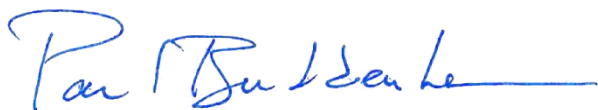
This information will be presented at the July 15, 2024 Sustainability Committee meeting.

CONCLUSION

Emeryville's initial Climate Action Plan, in 2008, set a goal of a 25% reduction in GHG emissions by 2020. As of 2022 Emeryville has reduced its total GHG emissions by 30%, and as such we have met (and exceeded) this initial goal and are on track for a 40% reduction in GHG emissions by 2030. The city will continue to move forward with CAP implementation actions and focus on the emission sectors where the city can have the largest impact. There is more work to be done.

PREPARED BY: Talia Paulson, Environmental Programs Civic Spark Fellow

**APPROVED AND FORWARDED TO THE
CITY COUNCIL OF THE CITY OF EMERYVILLE:**

A handwritten signature in blue ink, reading "Paul Buddenhagen", written over a horizontal line.

Paul Buddenhagen, City Manager

ATTACHMENTS

- Attachment A: Climate Action Plan 2.0
- Attachment B: Climate Action Implementation Plan 2.0