Environmental Quality Commission

SPECIAL MEETING AGENDA
Date: **8/31/2022**
Time: **6:00 p.m.**
Location: **Zoom.us/join – ID# 897 6743 1707**

NOVEL CORONAVIRUS, COVID-19, EMERGENCY ADVISORY NOTICE
Consistent with Government Code section 54953(e), and in light of the declared state of emergency, and maximize public safety while still maintaining transparency and public access, members of the public can listen to the meeting and participate using the following methods.

- How to participate in the meeting
  - Access the meeting real-time online at:
    Zoom.us/join –Meeting ID 897 6743 1707
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    (669) 900-6833
    Meeting ID 897 6743 1707
    Press *9 to raise hand to speak

Subject to Change: Given the current public health emergency and the rapidly evolving federal, state, county and local orders, the format of this meeting may be altered or the meeting may be canceled. You may check on the status of the meeting by visiting the City's website www.menlopark.org. The instructions for logging on to the Zoom webinar and/or the access code is subject to change. If you have difficulty accessing the Zoom webinar, please check the latest online edition of the posted agenda for updated information (menlopark.org/agendas).

Regular Session (Zoom.us/join – ID# 897 6743 1707)

A. Call To Order

B. Roll Call – Elkins, Evans, Vice Chair Hedley, Chair Kabat, Lin, London, Schmidt

C. Regular Business

C1. Approve the July 20, 2022 Environmental Quality Commission meeting minutes (Attachment)

C2. Consider recommendation to the City Council on the upcoming city vehicle and equipment purchases (Staff Report #22-003-EQC)

C3. Informational presentation from the EQC outreach subcommittee for citizen community outreach on the Climate Action Plan (Attachment)

D. Reports and Announcements

D1. Reports and announcements from staff and Commissioners

E. Adjournment

At every Regular Meeting of the Commission, in addition to the Public Comment period where the public shall have the

right to address the Commission on any matters of public interest not listed on the agenda, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during the Commission's consideration of the item.

At every Special Meeting of the Commission, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during consideration of the item.

For appeal hearings, appellant and applicant shall each have 10 minutes for presentations.

If you challenge any of the items listed on this agenda in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City of Menlo Park at, or prior to, the public hearing.

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CITY OF MENLO PARK

REGULAR MEETING MINUTES – DRAFT
Date: **7/20/2022**
Time: **6:00 p.m.**
Location: **Zoom**

A. Call To Order

Chair Kabat called the meeting to order at 6:02 p.m.

B. Roll Call

Present: Elkins, Evans, Hedley (Vice Chair), Kabat (Chair), Lin
Absent: London, Schmidt
Staff: Sustainability Manager Rebecca Lucky, Management Analyst II Ori Paz

C. Public Comment

- Ole Agesen recounted their experience, concerns, and recommendations to improve the building permit process to install a heat pump water heater.

D. Regular Business

D1. Approve the June 15, 2022 Environmental Quality Commission meeting minutes (Attachment)

ACTION: Motion and second (Hedley/ Elkins), to approve the June 15, 2022 Environmental Quality Commission meeting minutes, passed 5-0 (London and Schmidt absent).

D2. Discuss ideas for building decarbonization outreach and education

Sustainability Manager Lucky introduced the item.

- Diane Bailey spoke in support of outreach, requested the Commission agendize electrification permit streamlining, and offered support from Menlo Spark to assist with outreach.
- Ole Agesen spoke in support of Menlo Park taking a leadership role in addressing the global issue of climate change.

The Commission discussed outreach ideas (Attachment) and referred the topic to the Climate Action Plan (CAP) Outreach Subcommittee and permit streamlining to the Building Decarbonization Subcommittee.

D3. Review and discuss August meeting schedule

Sustainability Manager Lucky requested Commissioner availability and interest for the August Environmental Quality Commission meeting.

ACTION: By acclamation, the Commission directed staff to schedule a meeting in August, after the regularly scheduled date of August 17, 2022.

E. Reports and Announcements

E1. Reports and Announcements from staff and commissioners

- Sustainability Manager Lucky provided updates that staff is reviewing the model reach codes; working with Menlo Spark on the $1 million ICLEI grant application for building electrification and existing multifamily electric vehicle charging; and the City Council budget included funds for the Burgess pool electrification project and civic campus electrical capacity studies, one additional sustainability division position for a resilience and an additional $100,000 in the CAP fund to continue work on the approved CAP.
- Management Analyst II Paz provided an update regarding the Tesla Pilot for the Police Department, progress on facility conditions assessments, utility data aggregation, and work on the internal decarbonization guiding plan for city operations by 2030.
- Commissioner Elkins requested an update from the Trees and Sustainable Initiatives Subcommittee on the preliminary conversations regarding an urban tree canopy master plan.
- Commissioner Hedley provided an update and noted Commissioner Schmidt could provide additional information at a future meeting, or to the subcommittee members directly.

F. Adjournment

Chair Kabat adjourned the meeting at 8:01 p.m.

Ori Paz, Management Analyst II

Process

- Collect ideas and thoughts on tasks, partners, budget, and metrics to measure progress- this meeting
- Prioritize next month? Outreach subcommittee?
  - Trade-offs with other projects (e.g. Reach codes, CAP No.5- eliminate fossil fuels from city operations, etc.)

Ideas for Content

- Myth busting within the content
- English and Spanish
- Fire safety
- Using Menlo Spark informational documents

Ideas- General Outreach on Electrification

- Charrette to discuss electrification for various stakeholders to share their perspective
- Homes in the future art contest for schools
- Permit process templates and education
- Website- currently has material on it
- Farmer's markets (downtown and summertime at Meta)
- Email and social media blasts
- Animated videos
- School newsletter or school flyers
- In-person events (religious organizations)
- Electrification events
- Off the Grid food truck market- bring electric patrol vehicles if possible
- NextDoor
- Mailings
- Library display cases (civic center and Belle Haven)
- National night out
- Bon Marché street market
- Loaner induction stoves
- Tours of homes that have been electrified
- Bring an electric fire place as a model to events and city displays

- TBD- who and when

Ideas for Reach Code Outreach

- Emailing permit applicants about the proposed measures
- Property management and property owners that rent

Potential partners

- Menlo Spark
- Climate Resilient Communities
- EQC members
- Acterra
- Boys and Girls Club
- School Districts
- Religious organizations- Council of Churches in Belle Haven neighborhood
- Other non-environmental nonprofit organizations
- Fire district
- Rotary Club
- Chamber of Commerce
- Menlo Park Ready (MPC Ready)
- Friends of the Menlo Park library
- Menlo Park Climate Team- Silicon Valley 360
- High school students- environmental clubs
- El Concilio
- Police Department clean vehicles

Budget, Metrics and indicators

- TBD

STAFF REPORT

Environmental Quality Commission
Meeting Date: **8/31/2022**
Staff Report Number: **22-003-EQC**

Regular Business: **Consider recommendation to the City Council on the upcoming city vehicle and equipment purchases**

Recommendation

Staff recommends the Environmental Quality Commission consider a recommendation to the City Council on the upcoming city vehicle and equipment purchases:

- Three electric sedans for the police detective unit;
- One electric sedan for the police pool;
- One electric truck for the police community services unit;
- Two lower emission gasoline traffic enforcement motorcycles;
- Three electric light-duty public works trucks; and
- Five renewable-diesel-powered pieces of equipment for Public Works.

Policy Issues

The City Council adopted Resolution No. 6525 declaring a climate emergency and accelerated local actions to address climate change in December 2019. The City Council also adopted a sustainable vehicle fleet policy to help reduce greenhouse gas emissions (GHG) in March 2020 and the 2030 Climate Action Plan (CAP) in July 2020 that includes CAP strategy No. 5 to eliminate the use of fossil fuels from municipal operations by 2030. The Environmental Quality Commission (EQC) roles and responsibilities is to advise the City Council on matters involving environmental protection, improvement and sustainability. Lastly, the proposed vehicle purchase contracts exceed the city manager's purchasing authority and require City Council approval.

Background

Annually, replacement of fleet vehicles are considered based on mileage, age, downtime for repairs, mandated emission regulations and an assessment of all vehicles and equipment. Replacements must adhere to the City's CAP No. 5 goal to eliminate fossil fuels from city operations (Attachment A) and the Sustainable Fleet Policy (Attachment B) adopted by the City Council when making vehicle purchases.

Figure 1 outlines the sources of city operation GHG and Figure 2 indicates the vehicle fleet is the second largest contributor to the city's GHGs. Even through the GHG remain stable, reductions are needed to meet CAP goals.

Figure 1: Menlo Park municipal greenhouse gas emissions in 2019

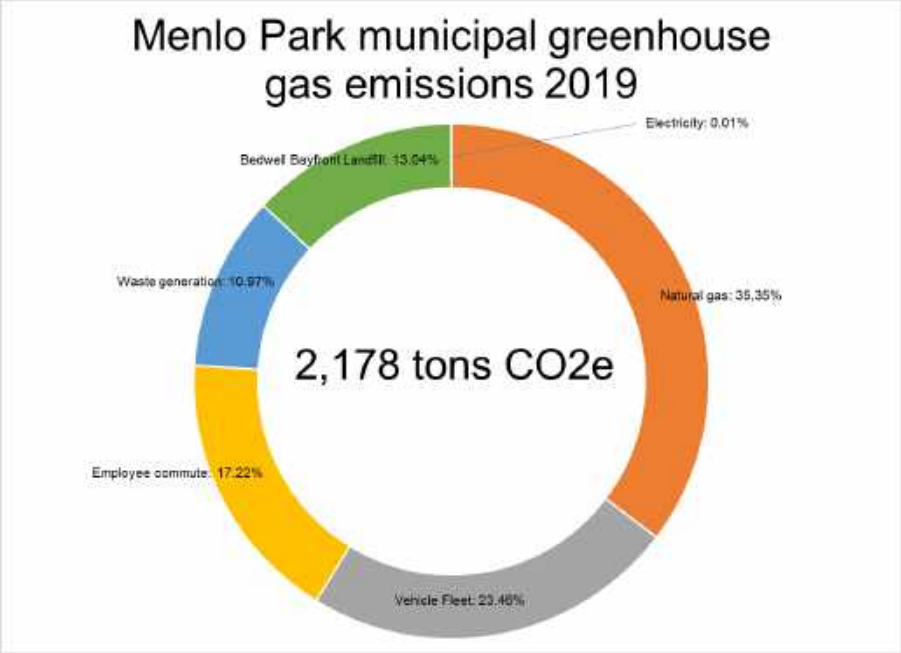
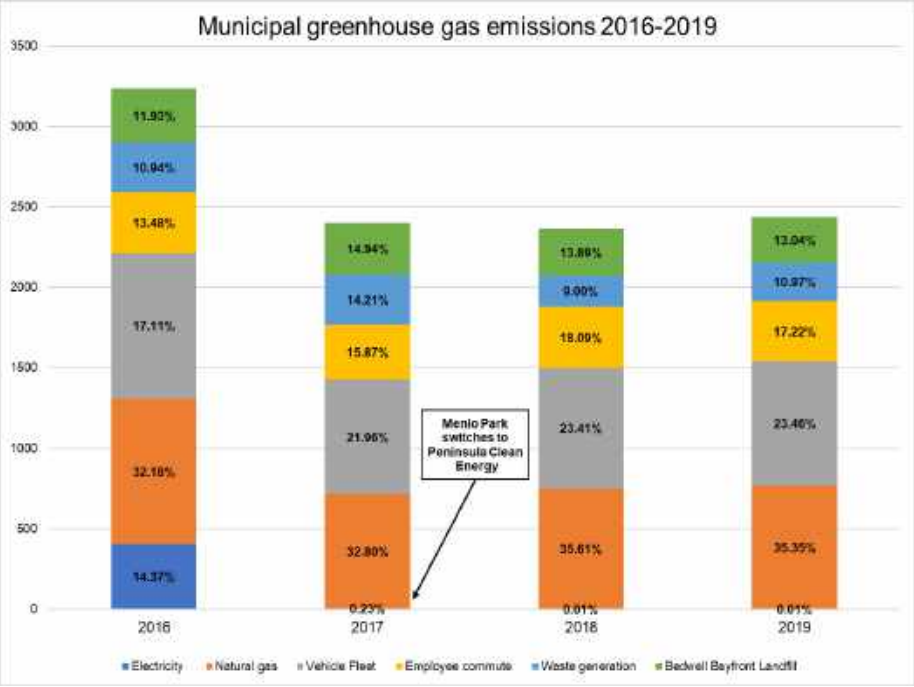


Figure 2: Menlo Park municipal greenhouse gas emissions between 2016 and 2019



The City has been actively replacing internal combustion engine vehicles with hybrids or electric vehicles. Last year, the City embarked on a strategic electric vehicle transition in the Police Department by purchasing three Tesla Model Ys to pilot in their patrol fleet, deploying one Ford Mustang Mach-E in the police administration fleet, and one Chevrolet Bolt soon to be deployed as a code enforcement vehicle. This is a major milestone for small sized police departments. Only two other police departments (City of Fremont and City of Seaside) in the region have outfitted Teslas for police patrol. Patrol vehicles require additional features to meet the performance and safety standards for both the public and the police officers using the vehicles. There are currently no commercially offered vehicle options built specifically for police use among the current vehicle models used for police patrol. Therefore, the pilot program will help determine whether the modified civilian vehicles could meet service needs for the police department. A memorandum with pilot program updates is included as Attachment C.

While the City is making significant strides in purchasing electric vehicles, additional work is still needed (and underway) to provide adequate charging infrastructure for the city vehicle fleet, employee commute vehicles and visiting public. Currently there are eight chargers available for the city's fleet and two chargers available for personal employee vehicles and members of the public in the City Hall parking lot. Funds were allocated as part of the recently approved Capital Improvement Plan budget for planning and implementation of electric vehicle (EV) charging infrastructure by the Sustainability Division and Public Works department this year. Short term solutions are also being evaluated, such as creating purchase accounts to enable staff the ability to pay to charge in other areas of the community or providing level one charging for employees. According to ChargePoint, level one charging takes 17 to 25 hours to fully charge an electric vehicle with a 100-mile battery while a level two charging takes four to five hours to fully charge the same vehicle.

The Analysis section of this report contains the proposed vehicle purchases for this year that will be considered by the City Council tentatively in the fall. The Environmental Quality Commission may want to consider providing recommendations to the City Council regarding the proposed purchases.

Analysis

The following section describes the Police and Public Works departments vehicle and equipment purchase proposals in fiscal year 2022-23.

Police proposes to:

- Remove three police vehicles with no replacements;
- Replace a pool gasoline vehicle with an electric alternative;
- Replace a community service truck with an electric alternative; and
- Replace two electric and one gasoline powered motorcycles with two lower emission gasoline motorcycles.

Public Works proposes to:

- Replace three gasoline light-duty trucks with similar electric alternatives; and
- Replace five renewable diesel maintenance equipment with similar alternatives.

Table 1 on the following page summarizes the fiscal year 2022-2023 vehicle and equipment purchase with recommendations classified by department in accordance with the decarbonization plan.

Table 1: Fiscal year 2022-23 vehicle/equipment purchase						
City department	**Number of vehicle type**	**Current vehicle fuel type**	**Proposed vehicle fuel type**	**Meets 2030 CAP no. 5 goal (yes/no)?**	**Meets sustainable fleet policy (yes/no)?**	**Reason for exemption**
Police	3 detective sedans (leased)	Gasoline	Electric	Yes	Yes	n/a
	1 pool sedan	Gasoline	Electric	Yes	Yes	n/a
	1 community service truck	Gasoline	Electric	Yes	Yes	n/a
	2 traffic enforcement motorcycles	Electric	Gasoline	No	Yes	Electric option not viable for traffic patrol operations
Public Works	3 light-duty trucks	Gasoline	Electric	Yes	Yes	n/a
	1 vibratory roller equipment	Renewable diesel	Renewable diesel	Yes	Yes	Electric option not yet available
	1 farm tractor equipment	Renewable diesel	Renewable diesel	Yes	Yes	Electric option not yet available
	1 reel/lawn mower equipment	Renewable diesel	Renewable diesel	Yes	Yes	Electric option not yet available
	1 stump grinder equipment	Renewable diesel	Renewable diesel	Yes	Yes	Electric option not yet available
	1 brush chipper equipment	Renewable diesel	Renewable diesel	Yes	Yes	Electric option not yet available

Police department

The two electric Zero Motorcycles, one a 2014 model and the other a 2016, are eligible for replacement based on age and are becoming more expensive and difficult to maintain. Zero Motorcycles were early adopters in building all-electric motorcycles and configuring them into police motorcycles. They no longer make a replacement battery for the 2014 model and officers have experienced malfunctioning electric circuits in the middle of duty while driving the 2016 model. This causes the motorcycle to be inoperable and is a safety concern. Staff are unable to maintain and repair these motorcycles in-house as the manufacturer does not readily release information relevant to repair, claiming it is proprietary information. Additionally, the motorcycles do not meet traffic patrol operation needs for hands-free communications and road speed due to safety concerns.

While some manufacturers produce electric motorcycles, the models available are not suitable for traffic enforcement police work. Traditionally, police motorcycles come from the factory and are then equipped with an aftermarket police package which includes emergency lights, sirens, police radio, etc. Because a gas powered motorcycle produces 12 volts of electricity from its charging system, attaching this type of emergency equipment is very simple. In the case of an electric motorcycle, the motorcycles have a computer controlled nervous system and do not have the ability to recharge the battery while running. Any 12-volt equipment would draw down the battery and require the motorcycle to be plugged in to recharge. This limits options for aftermarket outfitting. An electric motorcycle equipped with emergency equipment

must be programmed and built that way from the factory. For example, Harley-Davidson has a model called LiveWire One, which is built for urban riding with an aggressive riding position. However, this model does not have space on the motorcycle or the capacity to add police equipment required.

Other major limitations are, due to the above listed voltage issues, a police radio cannot be attached to these motorcycles. This situation causes the officer to be operating off his/her portable radio, which is an unacceptable safety issue when it comes to high speed full time enforcement. Officers are also sometimes required to change channels while riding, which is next to impossible at high speeds on a portable radio. Operating off of the portable radio would mean that the motorcycle officer would have to take one hand off of the handlebars of their motorcycle while maneuvering the vehicle, often at significant speeds and including turning, accelerating, and braking movements. In addition, the range capability of a portable radio is not sufficient to conduct out of the area operations. On a monthly basis, the Menlo Park Traffic Unit conducts operations, (STEP), in every city in the county.

There are also additional concerns regarding battery range and charging needs specific to motorcycles, as the technology is not identical to the advanced charging systems in four-wheeled commercially available electric vehicles.

As technology advances, vehicles and motorcycles continue to have better fuel economy than the previous models. The BMW gasoline powered motorcycles identified in the proposed vehicle purchase would substantially reduce vehicle emissions as compared to the motorcycles they would replace. These vehicles are estimated to have a useful life of approximately five years, at such time they will be evaluated for replacement and staff will continue to monitor what is available to seek out a viable electric alternative.

In additional to driving vehicles, officers also ride bicycles while on duty. Recently in August, the department received two electric bicycles, making a total of 15 bicycles. Their benefits include:

- Cover more ground more quickly during pursuits;
- More community engagement; and
- Conserve energy when engaging with suspects.

The officers ride bicycles a couple times a week, if not daily, as an alternative to driving patrol vehicles. This illustrates the willingness of the police department to engage in patrol alternatives that have less impact on the environment. This further reduces the department's carbon footprint and GHG emissions.

For consideration, officers drive the vehicles differently than an average commuter vehicle. The Police department is required to supply officers with vehicles 24 hours, seven days a week to respond to calls for service. An all-electric patrol vehicle would be operated and maintained differently than a gas-powered vehicle. For instance, a full battery charge, just like a full gas tank, would be required before an officer starts and ends their shift as anything can happen on the job. When maintaining an all-electric patrol vehicle, several factors come into consideration:

- *Battery drain*. Temperature fluctuations (e.g. heat or cold weather) reduce the charge of the battery. Even when "idling", the batteries are still powering the vehicle (such as internal lights and cabin temperature), which draws down the battery. Vehicles left overnight or for extended periods during the day without being driven show a draw down the battery. Given the unpredictable nature of the work the officers may engage in, one shift may see activities that require acceleration to high speeds in a pursuit scenario that use substantially more charge than another shift where there is no pursuit activity. Lastly, an all-electric car like a Tesla, would consume approximately five percent of battery capacity even if the vehicle is out of service overnight.
- *Additional weight*. Each police vehicle is outfitted to accommodate the additional police equipment required for the job. For example, the ballistic panels are added on the front doors and they add an

additional 120 pounds to the Tesla Ys. The vehicles will be even heavier once officers load their heavy equipment and entry tools. The extra weight affects the battery usage.
- *Charging time.* Depending on the type of electric vehicle charging station available and the vehicle charge, it may take 30 minutes to several hours to get a full battery charge.

These factors are the reasons why the City Council approved the purchase of three Teslas as part of a pilot program to familiarize police officers, administrators, stakeholders and fleet staff with the operation, performance and maintenance of electric patrol vehicles. The three Teslas should be service ready by November. Please see the Police Department Tesla Pilot Update Memorandum (Attachment C) for additional information.

Public Works department

The Public Works fleet is specialized and electric alternatives are not as readily available as the electric options available for passenger light-duty vehicles. Light-duty trucks have electric alternatives, but the medium and heavy-duty trucks along with larger equipment currently do not. The proposed purchase would replace three light-duty trucks and five pieces of equipment. Staff reached out to an electric tractor manufacturer multiple times, but their tractor is not compatible to the City's needs. For the large equipment, the use of renewable diesel will reduce GHG emissions from the production and transport of the fuel. According to Neste, a producer of renewable diesel, their fuel could reduce GHG emissions by up to 90 percent. It is made from sustainable sources, such as animal fats, plant and cooking oils, and plant waste and can be intermixed with fossil diesel.

With an average age of 18.5 years old and due to the State emission regulations requiring the current equipment to be phased out of use, Public Works are requesting the following five large equipment to be replaced:
- A vibratory roller, which is twenty-four years old and is used to help pave and make repairs to roadways;
- A farm tractor, which is used to renovate sports and activity fields and a reel mower, which is used to groom sports fields; and
- A stump grinder and a brush chipper to assist in tree removals and clear the wood debris.

In conclusion, staff proposes the total purchase of five electric Police vehicles, three electric trucks, two gasoline motorcycles, and five pieces of renewable diesel equipment. Including the upcoming proposed vehicle purchase for fiscal year 2022-23, the City would have 106 fleet vehicles. Out of the total fleet vehicles, 25 are hybrids (utilizing both gasoline and electric battery) and 14 are electric vehicles. The Police Department would have 11 electric vehicles and 22 hybrid patrol vehicles. The Public Works Department would have three electric vehicles, three hybrids, and 9 renewable diesel vehicles.

Impact on City Resources

Table 2 outlines the estimated total vehicle and equipment cost for fiscal year 2022-23, including the outfitting costs, as of August 24. Staff expects the vehicle costs to increase and the availabilities to be limited due to the current market trend.

Table 2: Vehicle and equipment costs				
City department	**Description**	**Type**	**Quantity**	**Cost**
Police	Detective vehicle	Similar electric alternative	3	$231,000
	Pool vehicle	Electric Ford Mustang Mach-E	1	$75,000
	Community service truck	Electric Ford F-150 Lightnings	1	$89,000
	Traffic motorcycle	Gas BMW	2	$81,000
Public Works	Light-duty trucks	Electric Ford F-150 Lightnings	3	$201,000
	Vibratory roller equipment	Compact roller	1	$34,000
	Farm tractor equipment	Similar sized farm tractor	1	$50,000
	Reel mower equipment	Toro 3100D	1	$49,300
	Stump grinder equipment	Vermeer grinder	1	$87,600
	Brush chipper equipment	Vermeer chipper	1	$106,300
Total				**$1,004,200**

Environmental Review

This action is not a project within the meaning of the California Environmental Quality Act (CEQA) Guidelines §§ 15378 and 15061(b) (3) as it will not result in any direct or indirect physical change in the environment.

Public Notice

Public notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting.

Attachments

A. Hyperlink – 2030 Climate Action Plan: beta.menlopark.org/Government/Departments/City-Managers-Office/Sustainability/Climate-Action-Plan
B. Resolution No. 6552
C. Police Department Tesla Pilot Update Memorandum

Report prepared by:
Joanna Chen, Management Analyst II
Ori Paz, Management Analyst II
Donald Weber, Fleet Supervisor

Reviewed by:
Brian Henry, Assistant Public Works Director
Rebecca Lucky, Sustainability Manager
Nicole Nagaya, Public Works Director
David Norris, Chief of Police

RESOLUTION NO. 6552

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MENLO ADOPTING SUSTAINABLE VEHICLE FLEET POLICY NO. CC-20-011 TO REDUCE GREENHOUSE GAS EMISSIONS BY INCREASING THE NUMBER OF ZERO-EMISSION FLEET VEHICLES

WHEREAS, on December 10, 2019 the City Council of the City of Menlo Park adopted Resolution No. 6535 declaring a climate emergency to accelerate its actions to address climate change and reduce greenhouse gas (GHG) emissions;

WHEREAS, internal combustion engine (fossil fuel) vehicles are large source of GHG emissions;

WHEREAS, the City currently manages a fleet of vehicles to provide specialized services to the community which are primarily internal combustion engine (fossil fuel gasoline) vehicles; and,

WHEREAS, recent advancements in technology, such as increased travel range, regenerative braking, and more spacious interior compartments have expanded the capabilities of zero-emissions vehicles so that more City work applications can be met with these vehicles; and,

WHEREAS, this policy defines policies and procedures for the acquisition and management of vehicles in the municipal fleet.

NOW, THEREFORE, IT IS RESOLVED, the City Council of the City of Menlo Park hereby adopts the City of Menlo Park sustainable vehicle fleet policy No. CC-20-011 recommended by staff and presented to the City Council on the twenty sixth day of March, 2020, incorporated herein as Exhibit A.

I, Judi Herren, City Clerk of Menlo Park, do hereby certify that the above and foregoing City Council Resolution was duly and regularly passed and adopted at a meeting by said City Council on the twenty-sixth day of March, 2020, by the following votes:

AYES: Carlton, Combs, Mueller, Nash, Taylor

NOES: None

ABSENT: None

ABSTAIN: None

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Official Seal of said City on this twenty-sixth day of March, 2020

DocuSigned by:

39280A20D0BE491...

Judi A. Herren, City Clerk

SUSTAINABLE VEHICLE FLEET POLICY

City Council Procedure #CC-20-011
Effective 3/26/2020
Resolution No. 6552

Purpose

To accelerate greenhouse gas emissions reduction due to the climate emergency and improve San Francisco Bay Area air quality, through the increased adoption of zero-emission vehicles in municipal fleet.

Authority

This policy will set forth the acquisition process for municipal fleet vehicles and outline practices to reduce greenhouse gas emissions related to fleet operation.

Background

In December 2019, City Council signed Resolution No. 6335 declaring a climate emergency which demands accelerated actions to address climate change. Menlo Park's climate action plan describes strategies and goals to urgently respond to this climate emergency, such as the acquisition of sustainable products over conventional products. Sustainable products have environmental benefits, such as greenhouse gas emission or waste reduction which do not easily translate to an economic value.

The City recognizes internal combustion engine (fossil fuel) vehicles are a large source of greenhouse gas emissions. The City currently manages a fleet of vehicles to provide specialized services to the community which are primarily internal combustion engine (fossil fuel) vehicles. However, recent advancements in zero-emission vehicles (ZEVs), such as increased market availability, travel range, regenerative braking, and more spacious compartments have expanded the capabilities of ZEVs so that more City work applications can be met with these vehicles. The zero-emission vehicle market is not as large as the internal combustion engine vehicle market, but it is growing rapidly. The ZEV market is predicted to offer products that meet 40 percent of current fleet needs by 2025.

Policies and procedures

The City of Menlo Park is committed to improving the San Francisco Bay Area's air quality and reducing greenhouse gas emissions by instating the following practices:

A. Reducing vehicle fleet tailpipe emissions through:

1. Establishing a "ZEV First" commitment for fleet vehicles that emit no tailpipe emissions from the onboard source of power.
2. Purchasing zero-emission vehicles (ZEV) as a first option priority for the municipal fleet even if comparable fossil fuel vehicles cost less to purchase.
3. Committing to a minimum of 50 percent of ZEVs for total vehicle purchases by 2025 and 75 percent by 2030.
4. Actively seeking vehicle fleet grants to purchase ZEVs.
5. Requiring the installation of electric vehicle charging infrastructure at the time of vehicle purchase, as appropriate considering economic and resource constraints, to support the annual purchase of ZEV.
6. Commit to test, evaluate, and, where feasible, acquire ZEVs for medium- and heavy-duty vehicle categories.

B. Implement the "ZEV First" commitment using the following process and procedure:

1. ZEV purchases shall be prioritized over comparable vehicles powered by internal combustion engines utilizing fossil fuels, flex-fuel, or bi-fuel vehicles powered by petroleum-based fuels (gasoline) and other alternative fuels, such as ethanol or renewable diesel.
2. Exemptions to purchasing a ZEV include:
   i. No viable ZEV option is available in the current vehicle market; OR

ii. The ZEV does not meet performance needs to provide services, including but not limited to, public safety, vehicle capabilities, and emergency response functions; OR
iii. No fueling infrastructure is available or planned to be completed within six months of vehicle purchase.

3. If an exemption to a ZEV purchase is pursued, the following priority structure will be used in considering a replacement vehicle:
   i. Defer purchasing a vehicle if a ZEV market option will be available and/or infrastructure will be installed in less than three years.
   ii. Lease plug-in electric hybrid vehicles if available in the market, or the less preferable option is to purchase.
   iii. Lease hybrid-electric fuel vehicles if available in the market, or the less preferable option is to purchase.
   iv. Lease an internal combustion engine (fossil fuel, flex-fuel or bi-fuel, ethanol, renewable diesel, etc.) vehicle, or the less preferable option is to purchase.

C. Fuel consumption
1. Reduce fossil fuel (gasoline and diesel) consumption 5 percent annually relative to baseline fuel consumption for fund year 2018-2019, and review at year end to take into account potential growth in fleet size.
2. Reduce miles driven annually by fleet vehicles through route optimization, utilizing GPS *(*Global Positioning System*)* devices or route optimization specific software.

D. Vehicle operations
1. Promote reduced idling, trip reduction, routing efficiency, and use of city bicycle fleet and public transportation to City departments.
2. Reduce fleet size by removing under-utilized vehicles, reviewing annually, from the fleet or through reassignment in place of additional units.

E. Cost effectiveness and performance
1. Seek grants, rebates, and other financial incentives and funding opportunities to use in purchasing ZEVs and/or implementing electric charging or refueling infrastructure.
2. Identify opportunities and the financial resources needed to replace older fleet equipment with zero-emission equipment.

F. Monitoring and reporting
1. Each fiscal year through the annual budgeting process, staff shall:
   i. Prepare an annual replacement assessment which will include budget estimates for zero-emission vehicles replacement, including the cost of necessary electric charging or refueling infrastructure;
   ii. Report any other actions taken to support or enhance the City's sustainable fleet policy.
2. Enhance fleet management systems and implement new technology with emphasis on reducing fossil fuel (gasoline and diesel) consumption and reviewing the City fleet annually to ensure each vehicle replacement purchase is necessary.

Legislative history

3

Action	Date	Notes
Adoption by City Council Resolution No. 6552	3/26/2020	

MEMORANDUM

Date: 8/18/2022
To: Environmental Quality Commission
From: Ori Paz, Management Analyst II, Sustainability Division
Re: Tesla police patrol pilot update

This memorandum provides an update on staff progress in implementing the Tesla police patrol pilot program.

Background

The 2021 vehicle purchase and Police Department Patrol Decarbonization Pilot Program (pilot program), adopted by the City Council October 26, 2021, included the purchase and outfitting of three Telsa Model Y electric vehicles (EVs) for experimental use as police patrol vehicles. The pilot program represents the continued commitment of the Police Department and Public Works Maintenance Fleet staff to advance the Sustainable Fleet policy and meet one of the 2030 Climate Action Plan (CAP) goals to eliminate 90 percent of fossil fuel use from city operations by 2030 (CAP strategy No.5). Staff projected the first patrol vehicles may be ready in August 2022. The 2021 staff report identified EV charging infrastructure, manufacturing delivery timelines and vehicle outfitting as the elements that would likely take the most amount of time. As predicted these elements, in combination with global supply chain issues, have pushed the projected patrol-ready timeline to November/December 2022.

Key pilot program updates:

Teamwork
- Beginning in March 2022 an interdepartmental team consisting of staff from Public Works fleet, maintenance, and engineering; the Police Department; and the Sustainability Division has been meeting regularly to discuss the program and report on progress from each group's work
- In July 2022, the team visited neighboring Police Department in Fremont to discuss lessons learned and see their Tesla patrol vehicles and EV charging infrastructure
- Several areas of quantitative data were identified at the onset of the pilot program and qualitative data areas related to operational performance and officer ergonomic and safety needs were also noted as important areas to track.
- The team is working to collect baseline information in advance of the pilot that will be compared with the data collected by officers using the Teslas throughout the pilot

EV charging
- Public Works engineering staff began work with the Police Department and Fleet on preliminary designs for EV charging for the Police Department lower lot in

spring 2022, building on prior work to evaluate the electric capacity of the city hall building prepared in 2018-2020.

- Design constraints related to the path of the planned wiring, output delivery of the proposed chargers, and capacity of the emergency electrical panel were identified resulting in a significant (approximately 200 percent) increase in the estimated project cost for the initial design
- A simplified project alternative was identified to shift an existing charger for City vehicles with two ports from the public lot to the secure Police Department parking area near the administration building at City Hall
- The simplified design was put out to bid in July 2022, with a contractor selected in August 2022 and set to be constructed by the end of September 2022 pending final execution of the contract
- Long term EV charging needs were evaluated under the City's draft Decarboninzation Plan and work on an EV charging implementation plan is currently underway to identify and procure charging infrastructure for City Hall and the Corporation Yard
- Staff and consultants will be looking to phase EV charger installations to maximize charging capacity for existing and proposed EV purchases in the near term within the existing electrical service capacity, and plan electrical service upgrades to align with available incentives to allow expansion to meet long term needs
- Community charging resources have been identified and may factor into future charging options

Vehicle purchase, delivery and outfitting

- Fleet staff purchased the vehicles in October 2021
- Delivery of the vehicles from the manufacturer was delayed by global supply chain issues and the vehicles were received in May 2022
- Outfitting was anticipated to take four months with a service-ready timeline of August 2022
- The vehicles were sent for ballistic door panel installation, paint, lights and communications equipment installation in June/July 2022
- Outfitting has taken additional time relative to a standard vehicle, due to specific design modifications and new equipment configurations related to communications tablet mounting; the vehicles are anticipated to be service ready by November 2022
- The current costs to date for the vehicles and outfitting can be seen in table 1 on the following page – the estimated cost in 2021 was approximately $115,000 per vehicle and the updated estimate to-date is approximately $103,052

Table 1: Cost to date for outfitted extended range Tesla Model Y	
Item	**2022 costs**
Purchase price with taxes and fees	$64,270
Computer solution (tablet)	$2,800
Computer solution (antenna)	$176
Safety outfitting	$25,000
Ballistic panels	$7,500
Graphics	$1,420
Police radio	$1,586
Wheel covers	$300
Total purchase price to date	**$103,052**

Next steps

- The collection of baseline data is set to begin in October 2022, one month in advance of the anticipated service-ready date for the vehicles to limit the impact on officers participating in the program. Patrol deployment of the vehicles is expected to begin in November 2022.

EQC Outreach Subcommittee Update August 31, 2022

EQC Outreach Subcommittee

Members

- Jeff Schmidt
- Nancy Larocca Hedley
- Tom Kabat

+ Marlene Santoyo of Menlo Spark

Activity Update

- Established subcommittee goals
  - Educate citizens and help “bust the myths” about environmental issues important to Menlo Park, elements of the Climate Action Plan, and activities that impact life in the city
  - Provide City Council with regular feedback from citizens on key environmental issues under consideration by the city
  - Encourage more citizen participation in city or regional activities, meetings, and personal activities that will impact climate goals
- Clarified messaging for kickoff meetings (on following slides)
- Created strategy for ongoing community climate education
- Identified key partners/non-profits in the community to collaborate with
- Kick-off meetings to be held at the Menlo Park Library, the Belle Haven Branch Library, and one via Zoom – targeting September 2022

Community Collaboration Sessions for Climate Preservation

Kickoff Meeting

Presented by [xxxxx]
For discussion with [organization]
[Date]

Agenda

Kickoff of Community Collaboration Sessions

Recent Climate Headlines

Menlo Park’s Climate Action Plan

Taking CAP Action

Community Input and Open Discussion

Actions and Additional Resources

Kickoff of Community Collaboration Sessions

Purpose

Share a vision for Menlo Park's future that responds to a changing climate

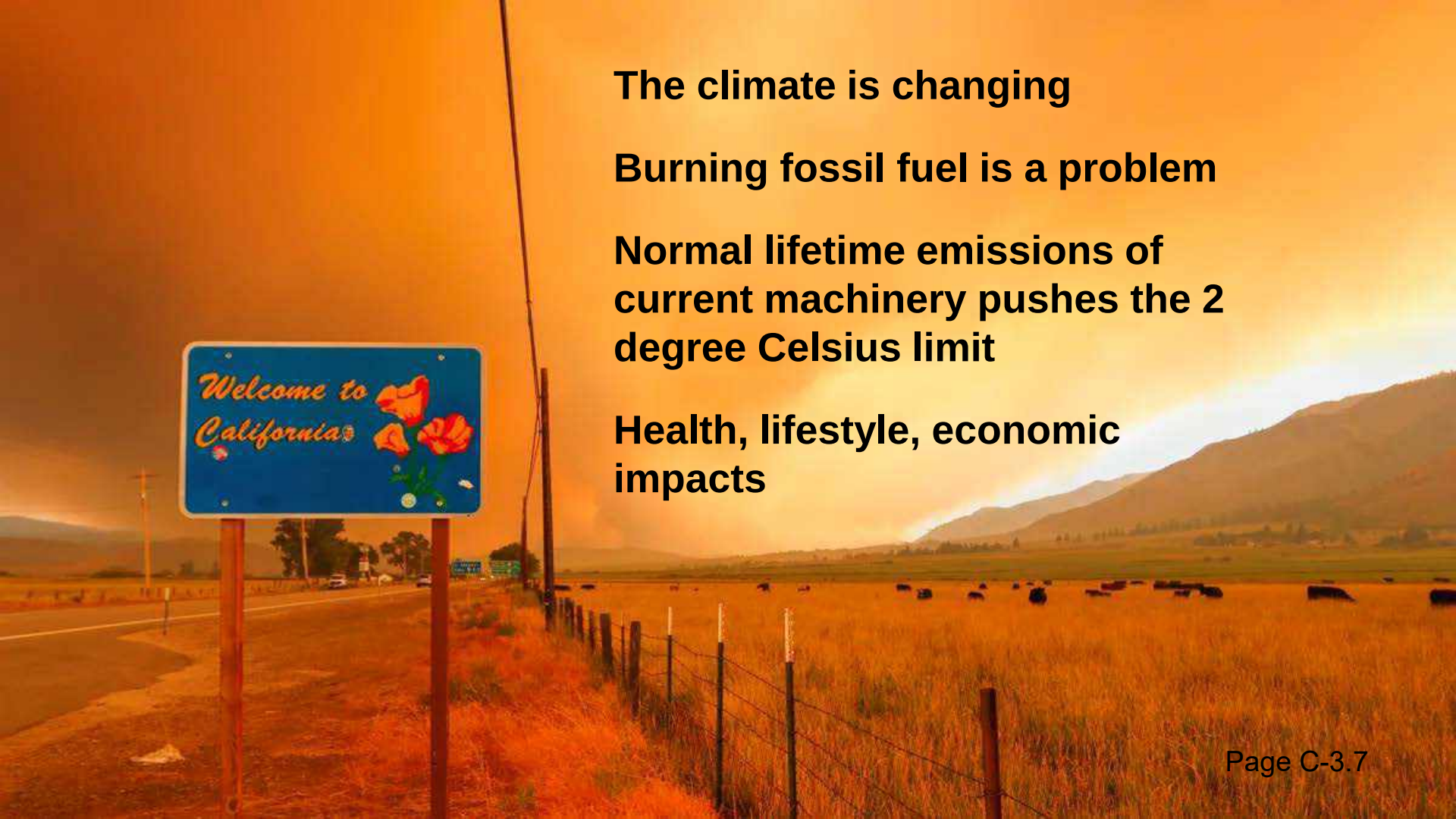
Provide overviews and updates on progress towards the goals in the city's Climate Action Plan

Gather ideas and feedback on climate issues, city actions, and various activities from the plan

Activate more citizen participation and ensure a range of voices are heard

Proposed Topics

- Electric Vehicles
- Sea-Level Rise and Flooding Mitigation
- Building Electrification
- Reach Codes
- Environmental Justice
- Urban Forest and Tree Canopy
- Green Careers



The climate is changing

Burning fossil fuel is a problem

Normal lifetime emissions of current machinery pushes the 2 degree Celsius limit

Health, lifestyle, economic impacts

ecoanxiety

[ek-oh-ang-**zahy**-i-tee, ee-koh□]

noun

Psychiatry.

anxiety caused by a dread of environmental perils, especially climate change, and a feeling of helplessness over the potential consequences for those living now and even more so for those of later generations.

Vision

Josh Becker

California State Senator

“We’re all in this climate emergency together. Every resident has a role to play. Every city has a role to play. We must work together in a virtuous circle to find solutions - local policy stances matter because it inspires a broader policy development overall. I appreciate everything that the City of Menlo Park has done to create a more sustainable and resilient community and look forward to seeing the effect of my neighbors' efforts.”

Betsy Nash

Mayor, Menlo Park

“Menlo Park’s Climate Action Plan is a great example of what a local community can do to address a global crisis through local action by setting high goals and finding the means to reach them.”

Recent Climate Headlines

Thursday, August 18, 2022
Today's Paper

The New York Times

As Federal Climate-Fighting Tools Are Taken Away, Cities and States Step Up

Across the country, local governments are accelerating their efforts to cut greenhouse gas emissions, in some cases bridging partisan divides. Their role will become increasingly important.

Momentum is building at the federal and state levels for new climate, cleantech and sustainability investments

Aug. 16, 2022

Biden Signs Expansive Health, Climate and Tax Law

The president returned briefly from vacation to sign a bill that passed the House and Senate on party lines after more than a year of fraught negotiations.

By JIM TANKERSLEY

Aug. 12, 2022

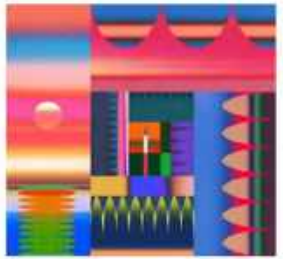
Ditching Fossil Fuels

The climate bill will make cleaner energy cheaper for everyone.

By GERMAN LOPEZ

DAVID WALLACE-WELLS

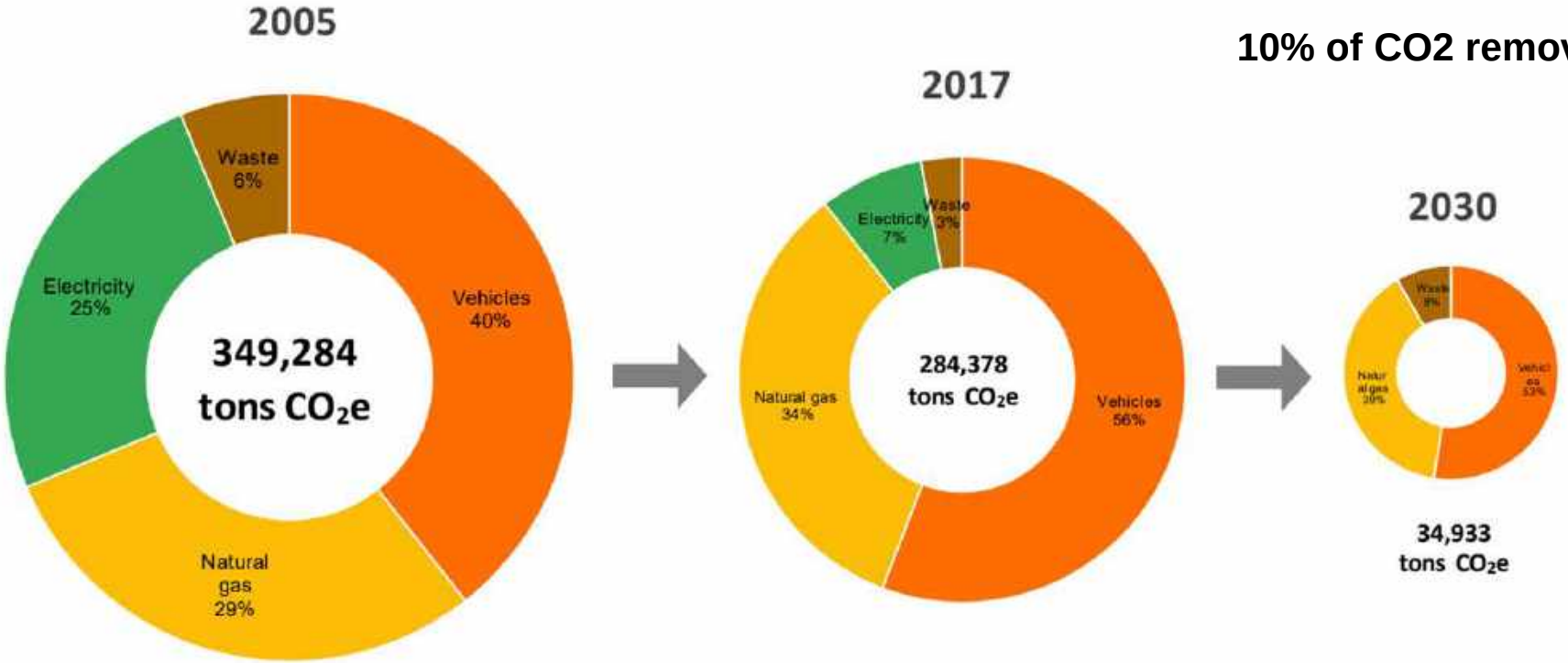
The Green Transition Is Happening Fast. The Climate Bill Will Only Speed It Up.



Menlo Park's Climate Goal - Zero Carbon by 2030

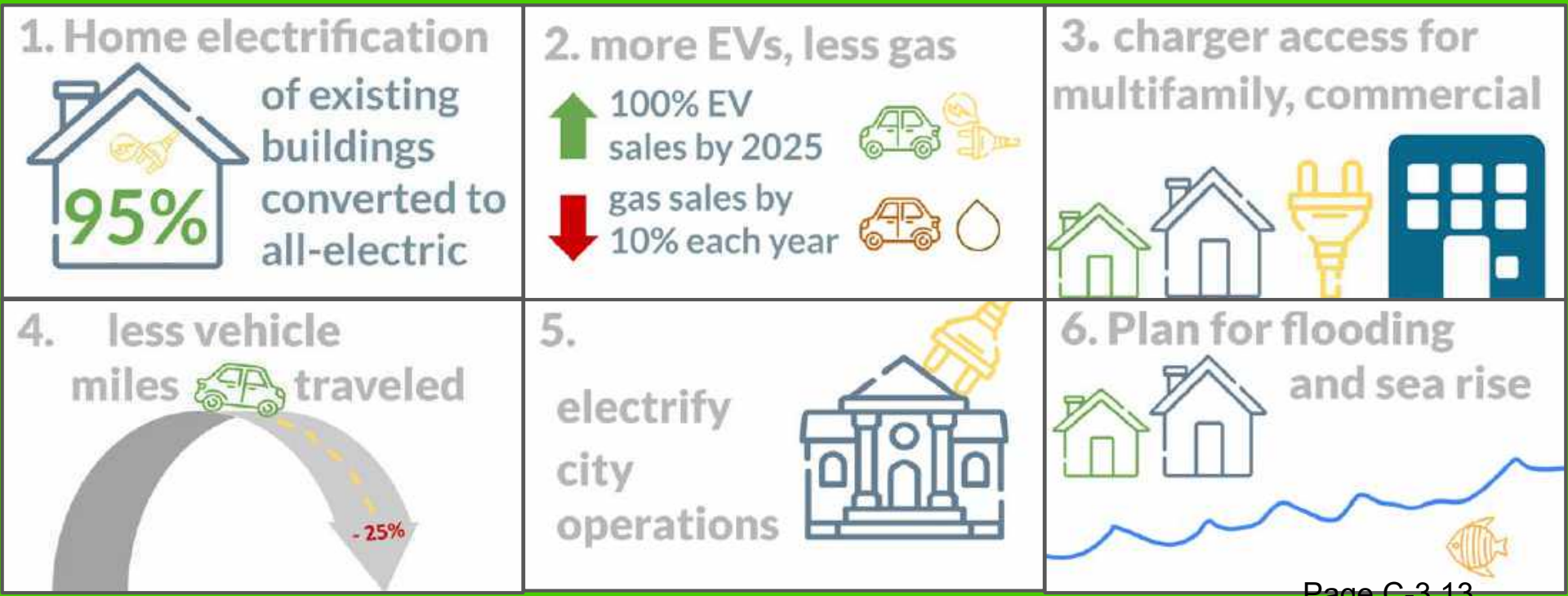
90% carbon dioxide reduction

10% of CO2 removal



Menlo Park's 2030 Climate Action Plan

These six are starting points for deeper change



Progress on Menlo Park's Climate Action Plan*

2022 - Agreement with BlocPower for building electrification services

2022 - Menlo Park Community Center (MPCC) building underway including renewable power microgrid system, 27 EV charging stations, solar pool heating. Tesla patrol pilot.

2020 - Adopts sustainable green fleet policy

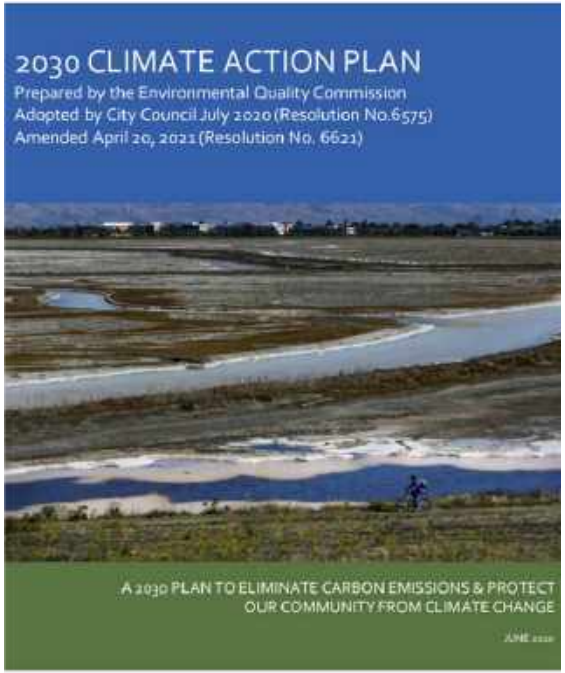
2020 - Reach codes require electrification in new buildings

2017 - Adopts community zero waste plan

2017 - New zoning ordinances include green sustainable building requirements

2016 - Electric vehicle charger installations in Civic Center and Downtown Parking Plaza 2

2015 - Solar photovoltaic installations

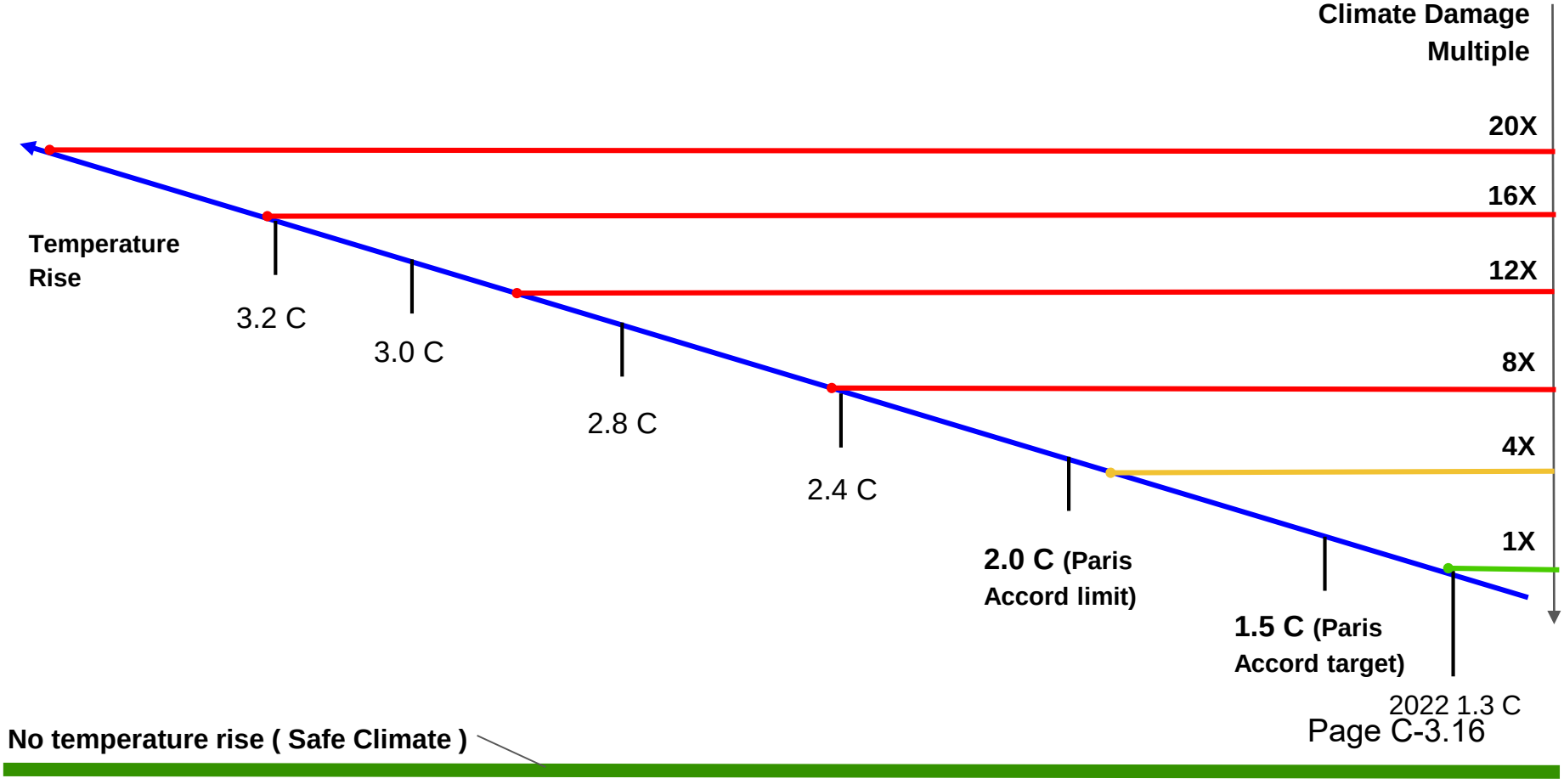


City adopts its first Climate Action Plan in 2009 and updates it in 2020

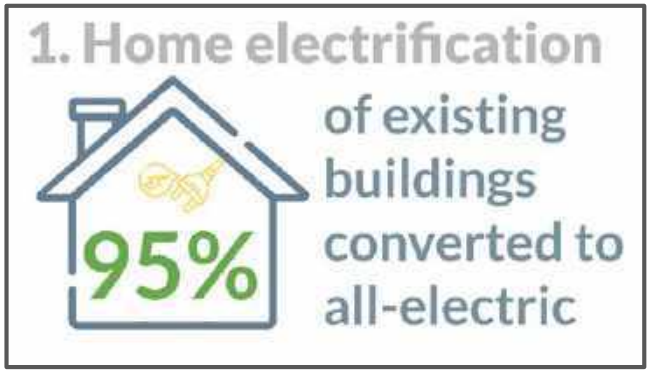
* Selected sample of achievements

Action

Temperature Rise and Climate Damage



Taking CAP Action - Home Electrification and EVs

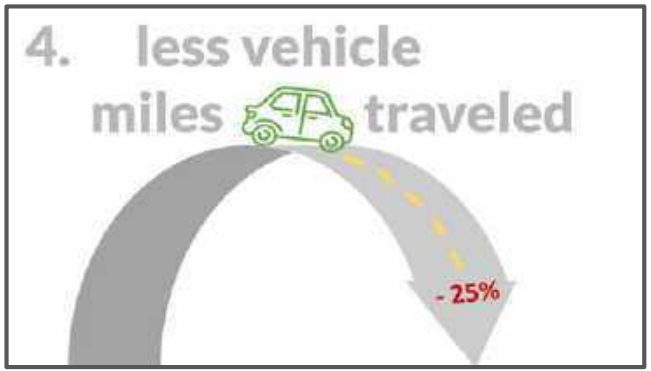


- Switch out your natural gas or electric resistance hot water heater for a Heat Pump Water Heater
- Air Source Heat Pumps can provide efficient heating and cooling for your home
- Upgrade your gas stove to an Induction Cooktop
- A Heat Pump Dryer can reduce energy use by at least 28% compared to standard dryers

- Purchase a new or used Electric Vehicle (EV) or e-Bike
- Lease a new EV and help create a market for used EVs in the future

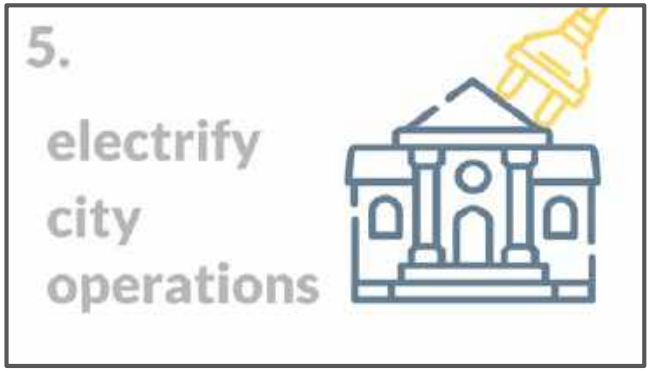
Taking CAP Action - Charger Access and Vehicle Miles

- Talk with your landlord about having EV charging available at your home
- Talk with the businesses you patronize and the places you work about the importance of EV charger access
- Be courteous and only park in EV charging spots when actively charging

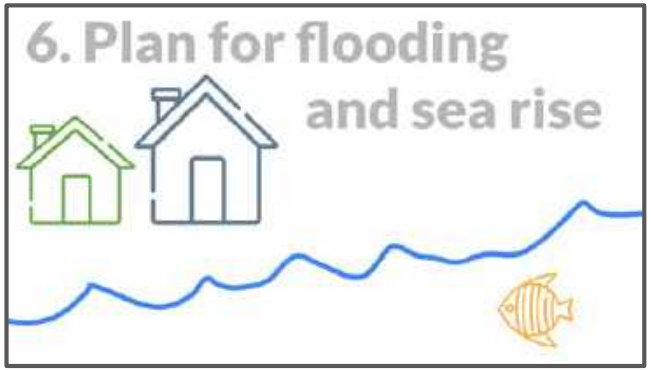


- Reduce vehicle miles traveled by walking or riding your bicycle, joining a carpool, or taking mass transit
- Reduce vehicle miles traveled by saving up errands and running them all at once

Taking CAP Action - City Operations and Flood Plans



- City staff working with consultants to complete Facility Conditions Assessments and collecting data to identify natural gas equipment replacement timelines
- Draft decarbonization plan is under review to provide cost analysis and next steps for CAP5
- Staff identifying and pursuing rebates / incentives to assist with funding equipment replacements and EV charging



- Staff continues work with regional partners and City SAFER Bay grant application
- Two proposed FY22-23 FTEs Sustainability (long-range planning and outreach) and Engineering for SLR protection (design)
- Find out more at https://oneshoreline.org/

Actions You Can Take

Policy

Share your thoughts on taking a bold, inspiring leadership role in the fight against climate change:

- Menlo Park City Council
- State Senators and Assembly Members
- U.S. Senators and Representatives

Participation

Join local activities and events from nonprofits, the city, schools, government agencies:

- Get on mailing lists and participate in activities from Acterra, Menlo Spark, 350.org Menlo Park, Client Resilient Communities, Canopy, others
- Festivals, Earth Day Celebrations
- Tree planting ceremonies

Programs

Take advantage of programs set up to fight climate change and save the environment:

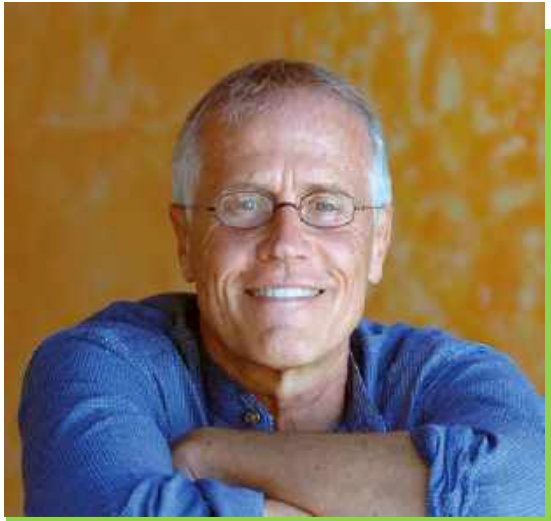
- Electric Vehicle incentives
- Home electrification
- BlocPower
- Peninsula Clean Energy
- Office of Sustainability, County of San Mateo

Collaboration

Dr. Ayana Elizabeth Johnson

Marine Biologist

“To see beyond what despair sees - to move from the feeling toward the possibility - calls for things we have in abundance: love, imagination, and a willingness to simply tend the world as best we can, without guarantee of success.”



Paul Hawken

Environmentalist

“Real change occurs from the bottom up; it occurs person to person, and it almost always occurs in small groups and locales and then bubbles up and aggregates to larger vectors of change.”

Question 1: Importance

On a scale of 1-5, how important to you is the issue of climate change?

1 Very unimportant
2 Somewhat unimportant
3 Neutral
4 Somewhat important
5 Very important

Circle one of these: 1 2 3 4 5

If you answered 4 or 5, what's the main reason it's important to you?

If you answered 1 or 2, what's the main reason it's unimportant to you?

Questions 2 and 3: Motivation and Likelihood

On a scale of 1-5, how motivated are you to make changes this year to your transportation, electrification, or consumption habits?

Circle one of these: 1 2 3 4 5

1 Very unmotivated
2 Somewhat unmotivated
3 Neutral
4 Somewhat motivated
5 Very motivated

On a scale of 1-5, how likely are you to make those changes to your habits?

Circle one of these: 1 2 3 4 5

1 Very unlikely
2 Somewhat unlikely
3 Neutral
4 Somewhat likely
5 Very likely

What factors are contributing to your motivations and likelihood to take action?

Question 4: Input for City Actions

At what pace would you like to see Menlo Park move towards its climate preservation objectives?

- ❑ Fast enough to meet Paris Accords 1.5-degree **target**
- ❑ Fast enough to meet Paris Accords 2-degree **rise limit**
- ❑ No additional City actions

What additional climate action(s) would you like to see from the city officials and staff of Menlo Park?

1.

Question 5: What Climate-Related Topics Interest You?

ENERGY

- ❑ Building Electrification
- ❑ Heat Pumps
- ❑ Electric Vehicles (cars, bicycles)
- ❑ EV Financial Incentives
- ❑ Electric Dryers
- ❑ Solar Panels
- ❑ Energy Storage

FOOD

- ❑ Induction Cooktops
- ❑ Vegetable-forward Cooking
- ❑ Kitchen Waste Reduction
- ❑ Composting
- ❑ Avoiding Kitchen Waste

GARDEN / LAND

- ❑ Wildfire Prevention
- ❑ Native Plants
- ❑ Water Capture / Preservation / Recycling
- ❑ Gardening in a Drought
- ❑ Preparing for Sea-Level Rise
- ❑ Preparing for Fire Storms
- ❑ Climate-Friendly Urban Design
- ❑ Urban Forest / Tree Canopy

SOCIAL

- ❑ Indigenous Wisdom for Climate Preservation
- ❑ Environmental Justice
- ❑ Living a Low-Carbon Lifestyle
- ❑ 15 Minute Cities
- ❑ Other _____

Your Feedback - Demographic Information

What is your affiliation with the City of Menlo Park?

I'm a resident of Menlo Park

I own a business or am employed in Menlo Park

I attend school in Menlo Park

I’m a climate-concerned member of the greater Bay Area community

Other _____

Open Discussion - What Other Ideas Do You Have?

We’re looking for local climate ambassadors to help spread the message throughout our community. If you’re interested in getting involved, share your email below

Email:

_____

Additional Resources

Menlo Spark

https://menlospark.org and https://menlospark.org/goelectric/

Benefits of Electrification: https://bit.ly/3AxZ66m

BlocPower: https://www.blocpower.io/electrify-menlo-park

City of Menlo Park

Climate Action Plan: https://bit.ly/3K3hvez

Other

https://www.peninsulacleanenergy.com/

https://fossilfreebuildings.org/

https://www.350siliconvalley.org/menlo-park

Home Electrifiers on Nextdoor: https://nextdoor.com/g/rgafu5vru/

Pocket Guide to Home Electrification: https://bit.ly/3AxpjC4

Inflation Reduction Act Savings Calculator

https://www.rewiringamerica.org/app/ira-calculator

Thank You