

# CLIMATE ACTION PLAN



## Town of Atherton's Climate Action Plan

*Last Updated September 2023*

*Images from left to right: Tree planting at Holbrook Palmer Park, the view from the Library, and the next generation learning at the 2023 Love Our Earth Festival*

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## Acknowledgments

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*Special thanks to the San Mateo County Office of Sustainability and their RICAPS program for our emissions inventory and quantification of our strategies!*



Atherton

CLIMATE ACTION PLAN

## 2023 CLIMATE ACTION PLAN UPDATE: PATHWAY TO CARBON NEUTRALITY

Through the strong leadership of the Atherton City Council, the 2023 update to the Town of Atherton's Climate Action Plan (CAP) outlines priority strategies to achieve a 49% emissions reduction by 2030 and to **achieve carbon neutrality in the Atherton community and government operations by 2045**. Carbon neutrality requires reducing greenhouse gas emissions (GHG) in Atherton by 100% from the 2005 baseline, which was the first year the Town completed a GHG emissions inventory. By reaching this goal, the Town of Atherton will demonstrate leadership in climate action, create a more sustainable and resilient community for all residents, and reflect the rate of action needed to mitigate the harmful impacts of climate change, including heatwaves, hazardous air quality from wildfire, extreme storms, and flooding, that the Town is already experiencing.

Atherton's CAP generates a pathway to make deep reductions in direct emissions generated from sources such as natural gas in buildings and petroleum in transportation. Using a variety of carbon sequestration strategies, remaining emissions can be captured and stored in landscapes throughout the Town. Establishing a bold carbon neutrality goal will not only bring economic, environmental, and societal benefits to the Atherton community but will also improve the efficiency of the Town's operations and enhance the quality of service provided to Town residents. The CAP supports the Town's efforts to manage its own GHG emissions and is a call-to-action to residents, community institutions and schools, and businesses to take an active role in the transition to a low-carbon future and clean economy.

### Highlights of climate strategies taken since the first CAP was adopted in 2016



#### Renewable Electricity

Formed Peninsula Clean Energy with all other jurisdictions in San Mateo County to provide 100% clean energy to residents. 283 homeowners installed solar.



#### Building Electrification

Constructed an all-electric Town Center with planned solar panel installation that will save the Town an estimated \$800,000 over 20 years.



#### Residential Energy Efficiency

Partnered with Home Energy Analytics to provide 148 homes with concierge energy saving service saving residents an average of 11% of their gas and electricity use or a total of \$2,000 annually. Participated in BayREN program resulting in 11 homes accessing rebates for whole house upgrades.



#### Zero-Emissions Vehicles

13% of Atherton's vehicles are electric or hybrid electric (2021 DMV data) and 182 EV charger permits have been issued.



#### Electric Vehicle Chargers

Installed 2 EV chargers at Town Center and are pursuing the installation of 8 more at Holbrook Palmer Park for a total of 20 charging ports.



#### Reduced Waste

Established organic waste program with GreenWaste Recovery to decrease Atherton's waste emissions by 26%. Adopted an ordinance to substantially reduce the use of disposable food ware at schools and organizations.



#### Bike Infrastructure

Six new miles of bike lanes have been built and grant projects are in the making for El Camino and Selby Lane doubling the number of miles for bike trips. Bike racks installed at Town Center in both public and employee areas.



#### Landscaping Equipment

Banned gas-powered leaf blower bans (effective July 1, 2024) and established \$250 rebate program.

These successes among others led to the Town to exceed it's goal of a 15% reduction from 2005 levels by 2020. The Town's 19% reduction is the equivalent of taking 4,374 gasoline-powered vehicles off the road for a year!

# 2023 PLAN AT A GLANCE

## Focus Areas

Building off of the Town's first CAP (2016), this 2023 update includes prioritized strategies for the Town to take in four focus areas including **energy and water, transportation, solid waste, and carbon sequestration & water conservation**. You'll find new strategies across each focus area alongside the priority strategies identified in 2016. Additionally, for the first year, this plan establishes a pathway to remove carbon in the atmosphere through carbon sequestration and begins to build a framework for including the climate impact of goods consumed in Town.

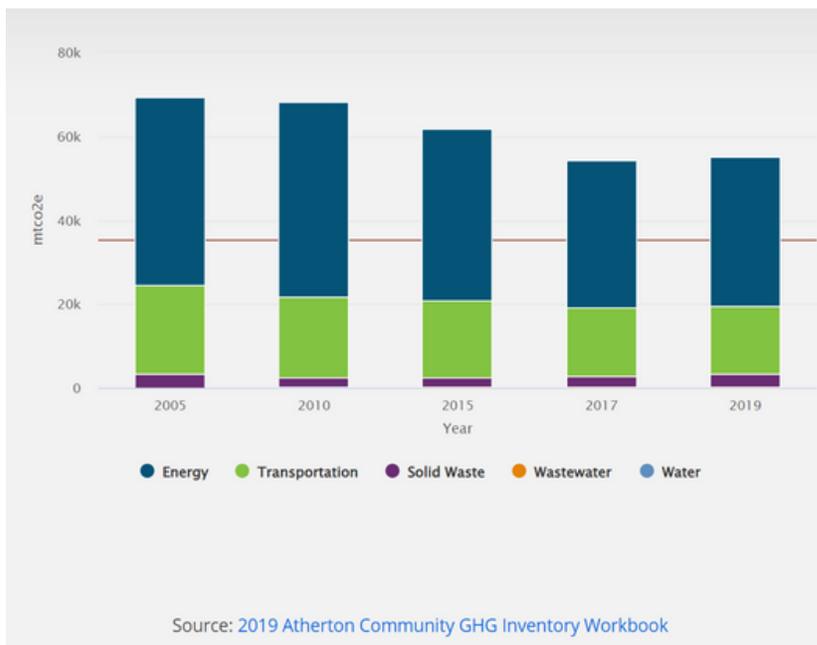
## Prioritized Climate Strategies

Town staff evaluated and selected CAP strategies based on GHG emission reduction potential, return on investment, feasibility, and priority from the Town's 2016 CAP. The strategies included in this report are critical to reducing the Town's carbon footprint and are intended to guide future sustainability program planning. Each focus area has goals, objectives, and supporting strategies. The goals state the quantitative targets for emissions reductions, the objectives provide measurable steps for achieving goals, and the strategies include concrete tasks needed to achieve the objectives that can be both taken by the Town and the community. The strategies in the tables below are listed in order of priority to implement. Implementation will be phased, depending on feasibility, funding, and available technology, over the next 22 years. The effort of all Town residents and employees is needed to achieve carbon neutrality.

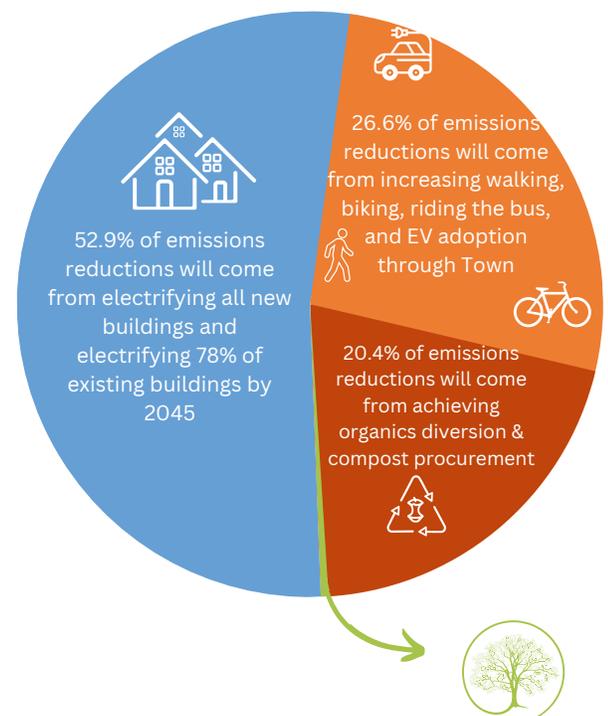
## Pathway to Carbon Neutrality

**Figure 1** shows a pie chart of the Town's GHG emissions. **Figure 2** demonstrates the potential percent decrease in emissions produced by each key objective by 2045 in order to reach carbon neutrality.

**Figure 1.** Atherton Community Emissions by Sector, 2019



**Figure 2.** Key objectives to reach carbon neutrality, or a reduction of 41,575 metric tons of CO<sub>2</sub>e by 2045.



Remaining amounts of carbon can be sequestered through tree planting. 200 trees planted will capture and store 0.4% of the Town's emissions.



# Climate Action Plan Objectives

## What are we trying to achieve?

The Climate Action Plan is structured around four focus areas: 1) Energy; 2) Transportation; 3) Solid Waste and Materials Management; and 4) Carbon Sequestration and Water Use. Each focus area has high-level objectives, and listed under each objective there are a variety of strategies that are critical in achieving the success of the quantified greenhouse gas emissions calculated with each objective. Included are a mix of strategies that will catalyze structural change, promote education, align funding, be feasible, support partnerships, and promote equity and inclusion. Review all of the Climate Action Plan's Objectives below.

### Building Energy

	Objective	2030 Goal	2045 Goal
BE- E1	Electrify new construction	100% of new construction is all-electric	Maintain 100% of new construction as all-electric
BE-E2	Electrify existing buildings	26% of existing buildings are electrified	78% of existing buildings are electric
E3	Promote use of clean energy	Reduce PCE opt-out rates to 3%	Maintain a 3% or less opt out rate

### Transportation

	Objective	2030 Goal	2045 Goal
T1	Implement the Projects in the Bike and Pedestrian Master Plan	Decrease vehicle miles travelled (VMT) by 0.42%	Decrease VMT by 1%
T2	Decarbonize passenger and commercial vehicles and off road equipment	Increase passenger adoption from 7.36% to 50%, increase commercial from 9.71% to 25% by 2030	Increase both to 100%
T3	Promote biking, walking, rolling, and taking transit through and in Town	Increase active transportation mode share from 2% to 4%	Increase active transportation mode share to 7%



# Climate Action Plan Objectives

## What are we trying to achieve?

### Solid Waste

	Objective	2030 Goal	2045 Goal
W1	Implement SB 1383 requirements to divert organic waste, reduce inorganic waste, and procure compost.	Reduce community-wide landfilled organics 75% by 2025 and maintain, apply 600 tons of compost to land areas throughout the community	Reduce all community-wide landfilled waste by 90%, apply 659 tons of compost to land areas throughout the community
W2	Eliminate single use plastics	Achieve zero plastic waste in municipal operations	Achieve zero plastic waste in the community
W3	Promote waste diversion through home composting, reducing, reusing, and recycling	Reduce all waste by 35%	Reduce all waste by 90% by 2040

### Carbon Sequestration and Water Use

	Objective	2030 Goal	2045 Goal
C1	Increase the community's tree canopy	Plant 650 trees	Plant 1,500 trees
C2	Explore carbon sequestration opportunities in the community	Quantify and pursue opportunities	Carbon loads that can not be zeroed will be offset by an array of carbon sequestration approaches
C3	Reduce embodied carbon in building materials	Achieve a 20% net reduction of GHG emissions of building materials	Maintain or increase 40% reduction (should be met by 2035 per AB 2446)
C4	Conserve water both in landscaping and in buildings	Gallons used is less than State guidelines per capita	Gallons used is less than State guidelines per capita

# Climate Action Plan Strategies

## ENERGY

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## TRANSPORTATION

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## SOLID WASTE

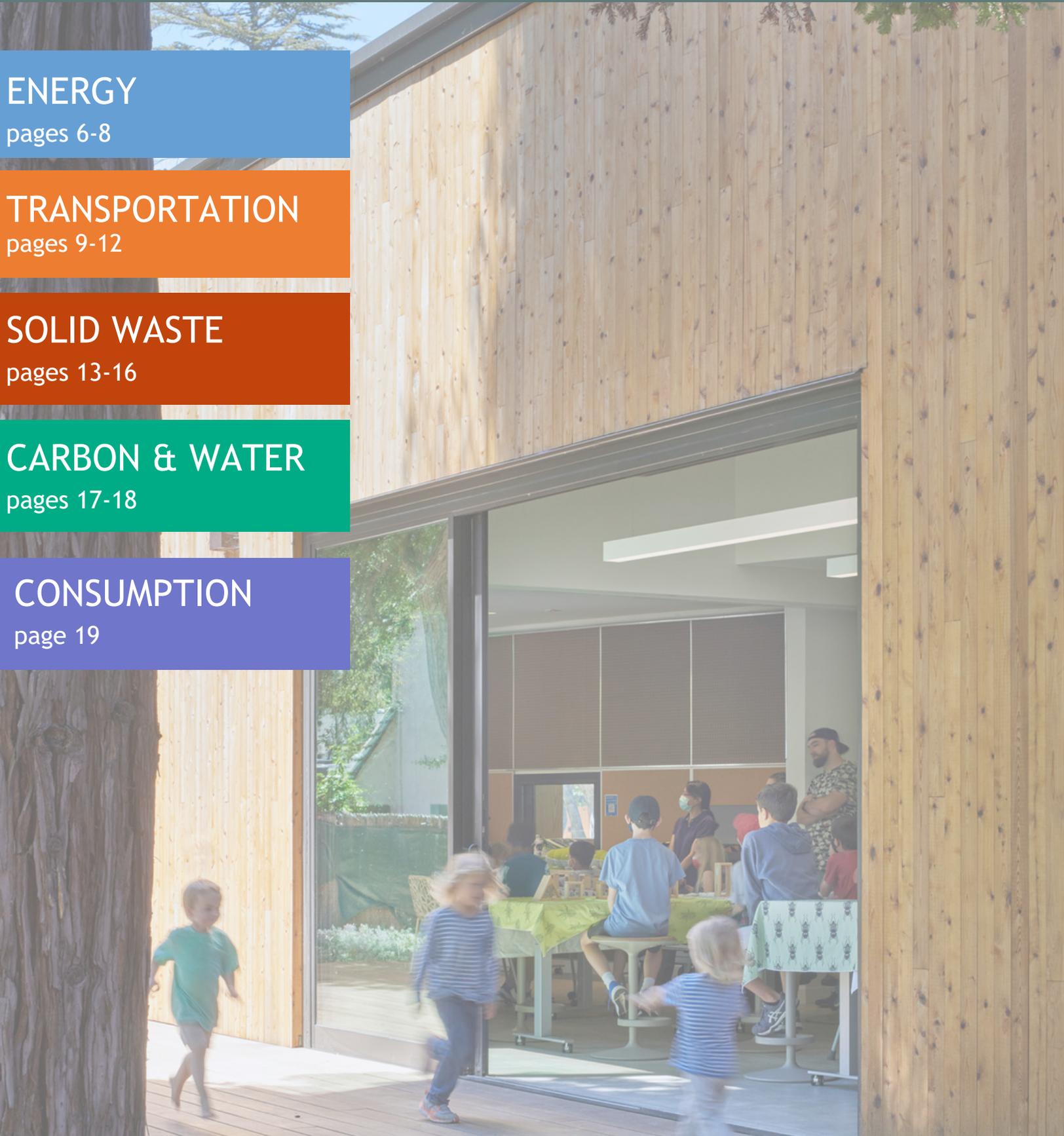
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# ENERGY

Buildings are the single largest contributor to GHG emissions in the Town, accounting for 65% of all emissions. These emissions stem primarily from the burning of methane (natural) gas and leakages in the gas infrastructure. Transitioning away from burning gas in buildings requires all-electric new construction and electric replacements for existing equipment at the end of its useful life. Below are the climate objectives and strategies designed to reduce emissions from new and existing buildings. The tables indicate whether these are new measures or priority measures first identified in 2016.

	Objective	2030 Goal	2045 Goal
E1	Electrify new construction	100% of new construction is all-electric	Maintain 100% of new construction as all-electric
E2	Electrify existing buildings	26% of existing buildings are electrified	78% of existing buildings are electric
E3	Promote use of clean energy	Maintain a 3% or less opt out rate	Maintain a 3% or less opt out rate

## OBJECTIVE 1: ELECTRIFY NEW CONSTRUCTION

Priority	Update	Strategy	Description
E1.1	New	Provide incentives and compliance pathways for new construction to be electric	Explore electric-preferred or electric required reach codes, increased permitting fees for natural gas infrastructure and equipment, increased requirements through CEQA, and compliance based on emissions per project.
E1.2	Refined EC1 from 2016 CAP	Encourage building all-electric	Conduct an educational campaign to promote the benefits and versatility of electrification using case studies, guides, and resources from Countywide programs.



## OBJECTIVE 2: ELECTRIFY EXISTING BUILDINGS

Priority	Update	Strategy	Description
E2.1	Refined EC2 from 2016 CAP	Provide financial incentives, technical support, and education to support the transition from gas to electric appliances including air source heat pumps, heat pump water heaters, electric dryers, and electric stoves	Work with PCE and PG&E, regional climate programs like RICAPS, and local installers to create an Electrification Support Hub to provide technical and financial support to residents, organizations, and businesses needing to replace gas appliances upon burnout. Promote incentives provided by PCE, PG&E, and other entities (like federal funding through the Inflation Reduction Act (IRA)) to assist with all-electric appliance replacements and the upgrade of electric panels to accommodate all-electric technologies including solar PV, battery storage, and electric vehicle chargers.
E2.2	New	Create policies to advance the adoption of electric appliances and systems in existing buildings	Explore electrification ordinances requiring: <ul style="list-style-type: none"> <li>• Replacement of HVAC systems, hot water heaters, stovetops, and other appliances be all-electric at time of replacement, upon major renovation, and at time of sale for residential buildings.</li> <li>• All buildings be electric-ready at the time of retrofit.</li> <li>• All air conditioning units to be replaced with heat pumps at time of burn out.</li> <li>• Solar and battery storage installations, if feasible.</li> </ul>
E2.3	New	Maintain an online clearinghouse of resources on electrification	Regularly communicate with PCE and PG&E about electrification opportunities and technologies. Provide detailed information on the Town's website including descriptions of the health and environmental benefits of electrification, links to PCE and PG&E resources on electrification, up-to-date lists of local contractors that perform electric retrofits, and information about the most cost-competitive residential electrification technologies currently available.
E2.4	Refined EC4 from 2016 CAP	Improve building permit compliance with electric building requirements	Develop and implement a comprehensive permitting compliance program to enforce the ordinance through routine training of staff, dedicating staff time to building inspections, charging fees for noncompliance, providing easy to understand compliance checklists online and with permit applications, and facilitating permitting online. Provide easy pathways for complying with voluntary CALGreen Tiers.

# ENERGY

## OBJECTIVE 2: ELECTRIFY EXISTING BUILDINGS (CONTINUED)

Priority	Update	Strategy	Description
E2.5	New	Establish partnerships with building professionals	Work with the local contractors, realtors, homeowners associations, and labor unions to develop a comprehensive building code and compliance training program, including hosting workforce development trainings discussing the benefits and technical requirements of electrification.
E2.6	New	Improve process at the building counter for major retrofits to go all-electric	Require all major retrofits to complete an electrification and efficiency checklist, clarifying the electrification and efficiency process requirements for homeowners and developers.
E2.7	New	Partner with schools for electrification, battery, solar, and electric vehicle charging projects	Identify ways that the Town can support local public and private schools in electrifying existing facilities, installing photovoltaic solar systems, battery storage, and electric vehicle charging infrastructure.
E2.8	New	Decommission natural gas lines	Work with PG&E to identify opportunities for natural gas infrastructure pruning to reduce the chance of stranded assets (functional natural gas infrastructure with ongoing maintenance costs that has become obsolete due to electrification) and identify funding for the abandonment and removal of the infrastructure.
E2.9	Refined EM3 & EM4 from 2016 CAP	Decarbonize Town facilities	Electrify facilities at Holbrook Palmer Park, install solar and storage where feasible, and maintain use of electric equipment across all Town facilities. Consider battery storage installation to replace or supplement diesel generators for emergency power. Leverage ABAG's Renewable Natural Gas Program for remaining gas loads.

## OBJECTIVE 3: PROMOTE USE OF CLEAN ENERGY

Priority	Update	Strategy	Description
E3.1	Refined EC6 from 2016 CAP	Maintain Town-wide participation in Peninsula Clean Energy	Work with PCE to conduct an annual analysis of non-PCE usage rates in the Town to understand why residents and businesses opt out of PCE or use direct access electricity.
E3.2	New	Raise community awareness of Peninsula Clean Energy	Collaborate with PCE and community-based organizations to conduct educational outreach to maintain the reduced opt-out rate levels.



# TRANSPORTATION

Transportation emissions stem from the use of gasoline in vehicles through and in Town and the Town's vehicle fleet. Transitioning away from gasoline in transportation will require forward-thinking initiatives to envision mobility in and around Atherton that does not rely on gas vehicles, behavior change, and the adoption of zero-emissions vehicles in the Town's fleet of vehicles. Presented below are the climate objectives and strategies that are designed to reduce emissions transportation.

	Objective	2030 Goal	2045 Goal
T1	Decarbonize passenger and commercial vehicles and off road equipment	Increase from passenger adoption from 7.36% to 50%, increase commercial from 9.71% to 25% by 2030	Increase both to 100%
T2	Promote biking, walking, rolling, and taking transit through and in Town	Decrease vehicle miles travelled (VMT) by 0.42%. Increase active transportation mode share from 2% to 4%.	Decrease VMT by 1%. Increase active transportation mode share to 7%.

## OBJECTIVE 1: DECARBONIZE PASSENGER AND COMMERCIAL VEHICLES AND OFF ROAD EQUIPMENT

Priority	Update	Strategy	Description
T1.1	New	Promote EV charger installations	Increase requirements for new construction projects to install a minimum number of EV chargers based on Tier 2 CalGreen requirements. Provide information on incentive programs to install chargers, including upgrades of panel and circuits (where needed).
T1.2	TRM1 from 2016 CAP	Decarbonize the Town's vehicle fleet	Prioritize purchase of electric vehicles and other alternative fuel vehicles where it meets operational requirements of the Police Department. Encourage staff to drive minimally and efficiently, where feasible and need dependent. Adopt a City Council ordinance for full fleet electrification by 2030.
T1.3	New	Decarbonize fleets headquartered in Town	Conduct an investigation of commercial and school vehicle fleets in the Town and identify employers and institutions to participate in available federal and local incentive programs. Explore utilizing business license to require electric vehicles for contractors doing business in Town.
T1.4	New	Coordinate regionally on decarbonizing delivery trucks	Collaborate with San Mateo County jurisdictions to establish a regional licensing fee for commercial delivery vehicles operating on fossil fuels to provide funding for new active transportation and EV charging infrastructure.

# TRANSPORTATION

## OBJECTIVE 1: DECARBONIZE PASSENGER AND COMMERCIAL VEHICLES AND OFF ROAD EQUIPMENT (CONTINUED)

Priority	Update	Strategy	Description
T1.5	New	Ban local operation of fossil fuel powered small off road equipment that the State is banning the new sale of.	Develop and adopt an ordinance and enforcement program that aligns with or exceeds AB-1346 to ban local operation of gasoline and diesel-powered off-road equipment.
T1.6	New	Provide incentives to decarbonize off-road equipment	Partner with BAAQMD to expand rebate and incentive programs available to residents to electrify off-road equipment. Educate residents on the availability of rebate and incentive programs and coordinate with local businesses using off-road equipment to conduct outreach on available rebate and incentive programs.
T1.7	New	Explore opportunities for biofuels in community and Town equipment	Partner with BAAQMD to expand rebate and incentive programs for upgrading off-road equipment and switching to biofuels.



Electric Vehicle Charging at Town Center



Children testing out electric rides captured by Leo Leung

# TRANSPORTATION

## OBJECTIVE 2: PROMOTE TRIP REDUCTIONS, BIKING, WALKING, ROLLING, AND TAKING TRANSIT THROUGH AND IN TOWN

Priority	Update		Description
T2.1	TRC1 from 2016 CAP	Improve infrastructure for biking and walking through Town	Implement the Town's Bicycle and Pedestrian Master Plan including expanding the bikeway network by 10.5 miles. Commit staff time to apply for and manage grants.
T2.2	New	Create zero carbon ways to participate in Town meetings and events	Offer bike parking and incentives for those who bike, walk, or carpool to Town meetings and events. Continue to offer remote participation options for all public meetings.
T2.3	Refined TRM3 from 2016 CAP	Participate and promote a program to help reduce single occupant vehicle commutes	Partner with Commute.org Trip Reduction Programs to provide Town employees and community members a suite of resources for sustainable commuting including rideshare programs, shuttles, route planning, and incentives.
T2.4	Refined TRM2 from 2016 CAP	Support clean commutes for Town employees	Where feasible, establish alternative work schedules and telecommuting to reduce employee commute. Continue to support housing options to enable Town employees to live or stay near Town Center during their work week. Establish a program to incentivize carpooling, vanpooling, biking, walking, and taking transit to work.



*Bike parking at Town Hall complete with tire fill-up and fix-it station*



*Test riding bikes and e-bikes at the Love Our Earth Festival on April 22, 2023*

# TRANSPORTATION

## OBJECTIVE 2: PROMOTE TRIP REDUCTIONS, BIKING, WALKING, ROLLING, AND TAKING TRANSIT THROUGH AND IN TOWN (CONTINUED)

Priority	Update	Strategy	Description
T2.5	TRC2 from 2016 CAP	Create safer routes for students to get to school	Collaborate with C/CAG and the SMCOE to implement and promote the Safe Route to Schools program by identifying funding avenues to invest in bike and pedestrian infrastructure around the Town's schools and hosting Town events and outreach to increase volunteer participation.
T2.6	New	Increase bike safety skills and awareness in the community	Partner with schools, youth sports leagues, and community groups such as Silicon Valley Bike Coalition to teach residents bicycle and pedestrian safety and educate them on the safe route availability and the health and environmental benefits of walking and bicycling.
T2.7	New	Coordinate with regional partners and neighboring jurisdictions on regional active transportation planning and infrastructure projects.	Remove cross-jurisdictional barriers to regional active transportation planning and infrastructure projects. Reference micromobility C/CAG Plans, coordinate with community-based organizations, and continue to monitor funding opportunities for active transportation projects from the San Mateo County Transportation Authority.
T2.8	New	Manage Atherton's employers' commute emissions	Require all employers to develop a Transportation Demand Management (TDM) Plan and require large employers (more than 25 employees) to include money-based incentives for employees to bike, walk, carpool, or take the bus to work.
T2.9	New	Improve access to public transit	Partner with regional agencies such as SAMTrans to conduct a study to determine transit priority corridors and determine best potential locations for local and regional public transit expansion. Explore programs to provide free transit rides to youth and residents living on low and fixed incomes and last mile options, shuttles, and car share programs.





# SOLID WASTE

Waste produced by households, schools, and other organizations in Atherton is sent to a landfill that decomposes and produces methane, which is a GHG that is 28 times more potent than carbon dioxide. Presented below are the climate objectives and strategies that are designed to prevent materials from entering the landfill through source reduction and waste diversion actions such as reducing, reusing, composting, and recycling.

	Objective	2030 Goal	2045 Goal
W1	Implement SB 1383 requirements to divert organic waste, reduce inorganic waste, and procure compost.	Reduce community-wide landfilled organics 75% by 2025 and maintain, apply 600 tons of compost to land areas throughout the community	Reduce all community-wide landfilled waste by 90%, apply 659 tons of compost to land areas throughout the community
W2	Eliminate single use plastics	Achieve zero plastic waste in municipal operations	Achieve zero plastic waste in the community
W3	Promote waste diversion through home composting, reducing, reusing, and recycling	Reduce all waste by 35%	Reduce all waste by 90% by 2040

## OBJECTIVE 1: IMPLEMENT SB 1383 REQUIREMENTS TO DIVERT ORGANIC WASTE, REDUCE INORGANIC WASTE, AND PROCURE COMPOST

Priority	Update	Strategy	Description
W.1.1	Refined WC3 from 2016 CAP	Require residential and commercial organic waste collection through updated waste hauler contracts	Update franchise agreement with waste hauler to include curbside organics pickup for both food waste and yard waste (potentially already completed because of regulation requirements), and continue to renew contract.
W1.2	New	Form SB 1383 Partnerships	Establish partnerships with institutions and businesses who are major generators of food waste, track major updates and metrics for success annually.
W1.3	Refined WC1 from 2016 CAP	Conduct Waste Characterization Studies	Conduct waste characterization studies every 4-5 years to inform programs and policies. Leverage study to understand the waste stream and create a plan to increase diversion and reduce contamination. Conduct outreach based on specific opportunities and needs identified through study.

# SOLID WASTE

## OBJECTIVE 1: IMPLEMENT SB 1383 REQUIREMENTS TO DIVERT ORGANIC WASTE, REDUCE INORGANIC WASTE, AND PROCURE COMPOST (CONTINUED)

Priority	Update	Strategy	Description
W1.4	New	Seek funding for education and implementation	Dedicate staff time to monitoring CalRecycle sources of funding for SB1383 implementation, including the SB1383 Local Assistance Grant Program and take advantage of funding for organics diversion programs.
W1.5	New	Partner with institutions to implement education campaigns	Partner with libraries and other existing facilities to market campaigns about waste reductions, reuse and repair.
W1.6	New	Track metrics from waste haulers	Work with hauler to determine data necessary to meet zero waste goals and establish protocol for regular collection and reporting of associated metrics.
W1.7	Refined WM1 from 2016 CAP	Create Sustainable Vendor Policy for Public Events	Encourage recycling at major public events (including at schools) of cardboard, paper, containers, and food/organics. Ensure provision of proper refuse containers and compliance with the Disposable Food Service Ware Ordinance.



*GreenWaste, the Town's waste hauler, engaging with residents.  
Photo credit: Veronika Hsu*



*Atherton Library Maker Space can be a hub for fix-it clinics, compost workshops, and more to get hands on to reduce waste.  
Photo credit: Bruce Damonte*

# SOLID WASTE

## OBJECTIVE 1: IMPLEMENT SB 1383 REQUIREMENTS TO DIVERT ORGANIC WASTE, REDUCE INORGANIC WASTE, AND PROCURE COMPOST (CONTINUED)

Priority	Update	Strategy	Description
W1.8	New	Fulfill SB 1383 Compost Procurement Requirement	Require City agencies to procure and apply compost generated from municipal organic waste to the exterior of suitable facilities as part of their operations.
W1.9	New	Build Partnerships with Stakeholders who Need Compost	Dedicate staff time to building partnerships with local growers and community green spaces to distribute compost and procure at scale, allowing for reduced procurement costs.
W1.10	New	Catalyze County-Wide Strategy to Match Compost Supply to Demand	Collaborate with San Mateo County Resource Conservation Program Compost Broker Program to comply with SB1383 compost procurement requirements; particularly remaining volume after strategies W-2.1 and W-2.2 have been accomplished
W1.11	New	Explore and optimize best carbon sequestration potentials for compost application	Conduct study in collaboration with local organizations to determine highest carbon sequestration potential for compost application in urban and peri-urban areas.
W1.12	New	Continue to research soil carbon sequestration through partnerships	Conduct ongoing outreach to procurers of compost to monitor soil carbon sequestration, partnering with local organizations and academic institutions
W1.13	New	Explore the potential for carbon credits for compost application	Explore partnerships with accredited carbon credit verifiers and technology providers who can quantify and monetize compost application credits.



*Meeting SB 1383 targets through a Countywide Compost Broker Program.*

*Left: Compost application at Blue House Farms in San Mateo County.*

*Right: Truck seen here is applying compost in Tunitas Creek late 2022.*

# SOLID WASTE

## OBJECTIVE 2: ELIMINATE SINGLE USE PLASTICS

Priority	Update	Strategy	Description
W2.1	WM3 from 2016 CAP	Establish zero waste policy in governmental operations	Add language to municipal procurement policy to choose non-plastic alternatives whenever possible.
W2.2	New	Collaborate with Institutions that Procure Large Volumes of Plastic	Work with institutions, especially Atherton schools to create model procurement policies to phase out single use plastics.
W2.3	New	Increase bans on problem materials	Ban items without means of recycling or recycling markets, such as sale of polystyrene, produce bags, plastic packaging, straws and other foodware, plastics #4-7, mixed materials.

## OBJECTIVE 3: PROMOTE WASTE DIVERSION THROUGH HOME COMPOSTING, REDUCING, REUSING, AND RECYCLING

Priority	Update	Strategy	Description
W3.1	New	Expand home composting	Explore bulk buying of home composting bins like EarthMachines to support home composting, conducting a multilingual education and outreach campaign to promote home composting. Track distribution of home composting equipment and monitor usage over time.
W3.2	New	Strengthen community composting	Dedicate staff time to coordinating network of community compost sites, setting a local diversion target. Community compost sites can serve as education hubs for community-scale composting.
W3.3	New	Leverage partnerships for food and agriculture education	Partner with local schools, CBOs, and Food Corps Service Members to create local community compost hubs.
W3.4	New	Provide local Atherton opportunities for reducing waste	Increase recycling of all materials by offering two community recycling and/or donation events annually and promoting County Environmental Health's Household Hazardous Waste Program.
W3.5	Refined WM1 and WM2 from 2016 CAP	Adopt an Environmentally Preferred Purchasing Policy for Town Procurement	Require that Town procurement of goods and services promote waste reduction and sustainability. Include requirements for plant-based catering, recycled paper, and compost. Provide guidelines for public events. Require vendors and Town Business Operators to follow the policy.



# CARBON SEQUESTRATION & WATER USE

The percent of carbon sequestration needed to offset emissions may vary based on Atherton's progress towards achieving carbon neutrality. If Town achieves the emission reduction strategies outlined in this plan, then there will remain less than a percent of emissions. If Atherton does not successfully implement all emissions reduction strategies, the percentage needed for carbon sequestration will be higher. Presented below are the climate objectives and strategies designed to sequester carbon and remove it from the atmosphere.

	Objective	2030 Goal	2045 Goal
C1	Increase the community's tree canopy	Plant 650 trees	Plant 1,500 trees
C2	Explore carbon sequestration opportunities in the community	Quantify and pursue opportunities	Carbon loads that can not be zeroed will be offset by an array of carbon sequestration approaches
C3	Reduce embodied carbon in building materials	Achieve a 20% net reduction of GHG emissions of building materials	Maintain or increase 40% reduction (should be met by 2035 per AB 2446)
C4	Conserve water both in landscaping and in buildings	Gallons used is less than State guidelines per capita	Gallons used is less than State guidelines per capita

## OBJECTIVE 1: INCREASE THE COMMUNITY'S TREE CANOPY

Priority	Update	Strategy	Description
C1.1	New	Increase carbon sequestration through tree planting	Develop and implement an Urban Forestry Master Plan by 2025.
C1.2	New	Track data on tree health	Survey and collect data on existing trees, including tree maintenance and replacement
C1.3	New	Maintain urban tree canopy	Dedicate staff time and resources to maintaining urban tree canopy (pruning, replacement, and preservation) based on data collected in CS-1.2.

# CARBON SEQUESTRATION AND WATER USE

## OBJECTIVE 2: EXPLORE CARBON SEQUESTRATION OPPORTUNITIES IN THE COMMUNITY

Priority	Update	Strategy	Description
C2.1	New	Identify emergent carbon sequestration opportunities	Conduct a carbon sequestration feasibility study by 2030 to identify urban and natural working lands opportunities and emergent technology for carbon sequestration within the community.
C2.2	New	Identify carbon farming opportunities	Collaborate with the San Mateo Resource Conservation District to identify carbon farming opportunities and other carbon sequestration opportunities within the community.

## OBJECTIVE 3: REDUCE EMBODIED CARBON IN BUILDING MATERIALS

Priority	Update	Strategy	Description
C3.1	New	Study Embodied Carbon in Building Stock	Dedicate staff time to data collection of embodied carbon in existing building stock, and future highest value opportunities for carbon sequestration in new construction. Consider municipal procurement policies prioritizing development of buildings that reach the embodied carbon requirements implied under AB 2446.
C3.2	New	Explore emergent embodied carbon pilot projects	Explore pilot projects with companies working on embodied carbon materials including cross laminated timber, carbon capture cement, and others, publicizing pilot projects

Priority	Update	Strategy	Description
C4.1	WTRC1 and WTRC3 from 2016 CAP	Promote water conservation incentives and inspire behavior change	Make concerted effort to promote and expand the distribution of rebates for water efficient appliances and fixtures, rain barrels, irrigation system, and drought resistant landscapes to both residents and landscape professionals. Educate on conservation mandates and encourage voluntary water conservation measures.
C4.2	WTRC2 from 2016 CAP	Adopt water conservation ordinance	Adopt, implement, and enforce the Bay Area Water Supply and Conservation Agency's (BAWSCA) Model Water Efficient Landscaping Ordinance.



# UNDERSTANDING OUR CONSUMPTION

In this CAP, the Town's generation-based GHG inventory informs the proposed climate strategies. This measurement method includes 1) direct consumption of energy by residents, businesses, and government operations 2) consumption of energy via the electrical grid, and 3) emissions from the treatment/decomposition of waste. This is the industry-accepted methodology for quantifying community GHG emissions, with emissions reported by the emission source category.

Category	Included in Generation-based Inventory	Not Included in Generation-based Inventory
Transportation	Vehicle fuel	Vehicle fuel production Motor vehicle manufacturing and repairs Air travel
Buildings	Electricity Natural gas	Energy indirect Construction Waste
Food	Grown and distributed within San Mateo County	Cereals Fruits/vegetables Dairy Meat Other food
Purchased goods	Manufactured in San Mateo County	Small appliances and entertainment equipment Clothing Home furnishings and large appliances Other goods
Services	Services accessed in San Mateo County	Healthcare Education Entertainment and Recreation Financial Services Information and Communication Miscellaneous
Waste	Composting Recycling	N/A

*Table: The 2023 CAP builds on the 2016 CAP to achieve carbon neutrality from the generation-based activities as defined in the orange table to the left. Consumption that is not included in the generation-based inventory is not yet measured, but is being addressed in our planning efforts for the first time. Examples of consumption are included in the third column of the table.*

However, there are gaps in generation-based inventories. Consumption of goods and services (including food, clothing, electronics, and air travel) are not measured at the Town level. The County of San Mateo is beginning to track emissions from countywide consumption and has developed consumption-based objectives to achieve a carbon-neutral community. Consumption-based objectives included in this plan serve as an introduction to a new, holistic way of quantifying emissions. Our methods of tracking progress and taking action on these consumption-based objectives will evolve. They are presented below as a way to paint the whole picture of the Town's climate impact, inspire individual behavior change, and serve as a foundation for future work to address how our consumption of goods and services impacts the climate.

## Consumption-based Objectives

Sector	Objective	Ideas to Inspire Action
Transportation	Decrease unnecessary air travel	Airplanes burn large amounts of fossil fuels, producing significant greenhouse gas emissions. Meet virtually, take a train, or skip that long-distance trip altogether. Taking one less long-haul return flight can reduce emissions by up to almost 2 tons of CO <sub>2</sub> e.
Food	Reduce the emissions intensity of food consumed	Eating more vegetables, fruits, whole grains, legumes, nuts, seeds, and less meat and dairy produces fewer greenhouse gas emissions and less energy, land, and water. Shop at local farmers' markets.
Purchased Goods	Shift consumer spending from discretionary goods to local recreational activities	Rather than gifting material goods, consider purchasing a County Parks Pass or tickets to a local show.
Purchased Goods	Reduce the emissions intensity of consumer goods	Buy good manufactured locally or produced in a carbon neutral facility.

# LOOKING AHEAD TO IMPLEMENTATION

The CAP provides an overarching, strategic framework for the Town of Atherton to achieve the goal of carbon neutrality by 2045. It is critical that the Town's Climate Action Plan remains a living document, to be updated and adapted as new technology becomes available, as policies progress, and to reassess the carbon neutrality goal for opportunities to accelerate progress. Strategies within this report will be implemented in a phased approach and it will take the efforts of all Town employees, the Environmental Programs Committee, and community members to be successful. The implementation strategy includes further analysis of critical projects, establishing project timelines, and estimating associated cost. Town staff will start implementation with the following efforts:



## Hone in on opportunities with Town operations

Finalize a Municipal Building Portfolio study to understand the timeline and cost for replacing and/or early retirement of natural gas equipment and develop an electrification plan for the buildings at Holbrook Palmer Park.

The Atherton Police will move to purchase electric vehicles.

Three patrol vehicles are already hybrids, four will be transitioning to electric when ready for replacement, and the remaining pursuit-rated fleet will be evaluated per the California Air Resources Board rule starting in 2024, we will need to have 50% of our vehicle purchases be electric and 100% by 2027.



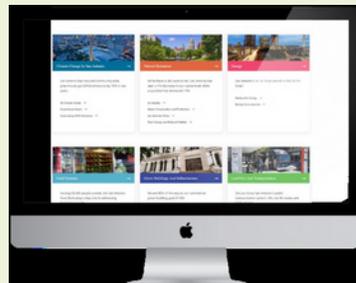
## Expand Compost Giveaway Program

Offer compost at Holbrook Palmer Park year round for residents to pick up and apply to their landscapes. Find opportunities for contractors to access pile or other SB 1383 compliant materials for larger remodels and new construction projects.



## Deepen Partnerships with local energy programs

Establish pathways for Atherton residents to access regional technical assistance, rebates, and financing programs including those offered by Home Energy Analytics, Peninsula Clean Energy, and BayREN. Create a one-stop-shop experience for residents where they are able to get concierge and customizable support on their home electrification journey. Leverage model policies from Peninsula Clean Energy and BayREN to encourage electrification.



## Create an inviting, data-driven climate action hub custom for Atherton community members

Publish climate action plan data as an interactive dashboard connecting the community's goals with tangible strategies that they can take. Curate programs, resources, and educational materials in one space that allows residents to find exactly what they need to support their sustainability journey.



## Pursue Funding and Assistance

Continue to seek climate action planning funding and technical assistance from regional, state, federal, and philanthropic sources to support developing new community programs, upgrading infrastructure and equipment, and calculating annual GHG emissions inventories.