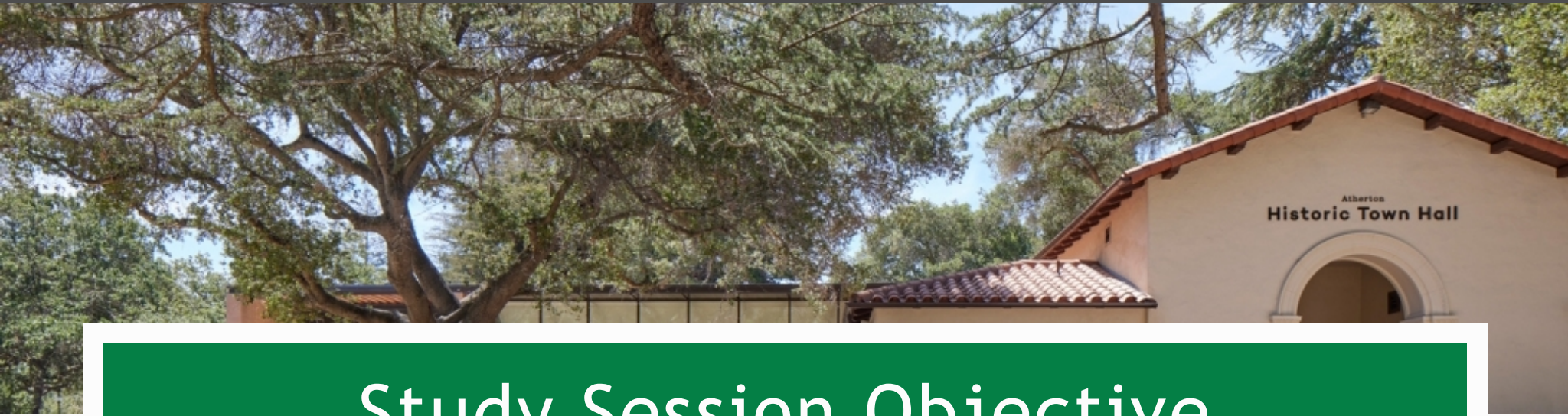


# CLIMATE ACTION PLAN UPDATE

ATHERTON CITY COUNCIL  
OCTOBER 4, 2023







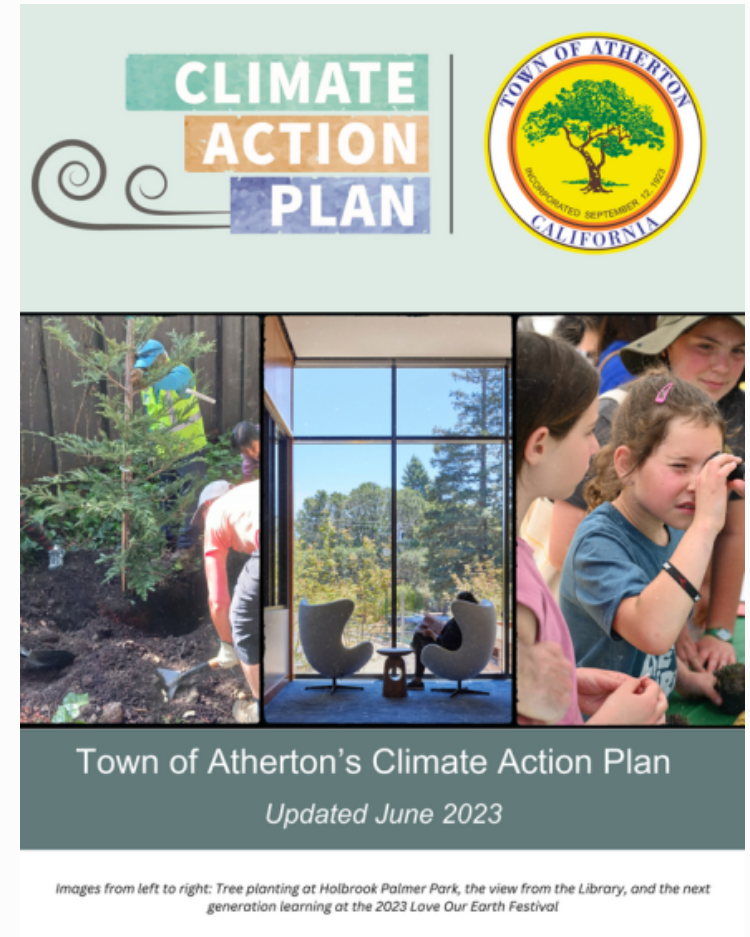
## Study Session Objective

- Review and discuss the 2023 Climate Action Plan Update
- Adopt CAP as an update to the 2016 CAP and Authorize Submittal of CEQA Notice of Exemption

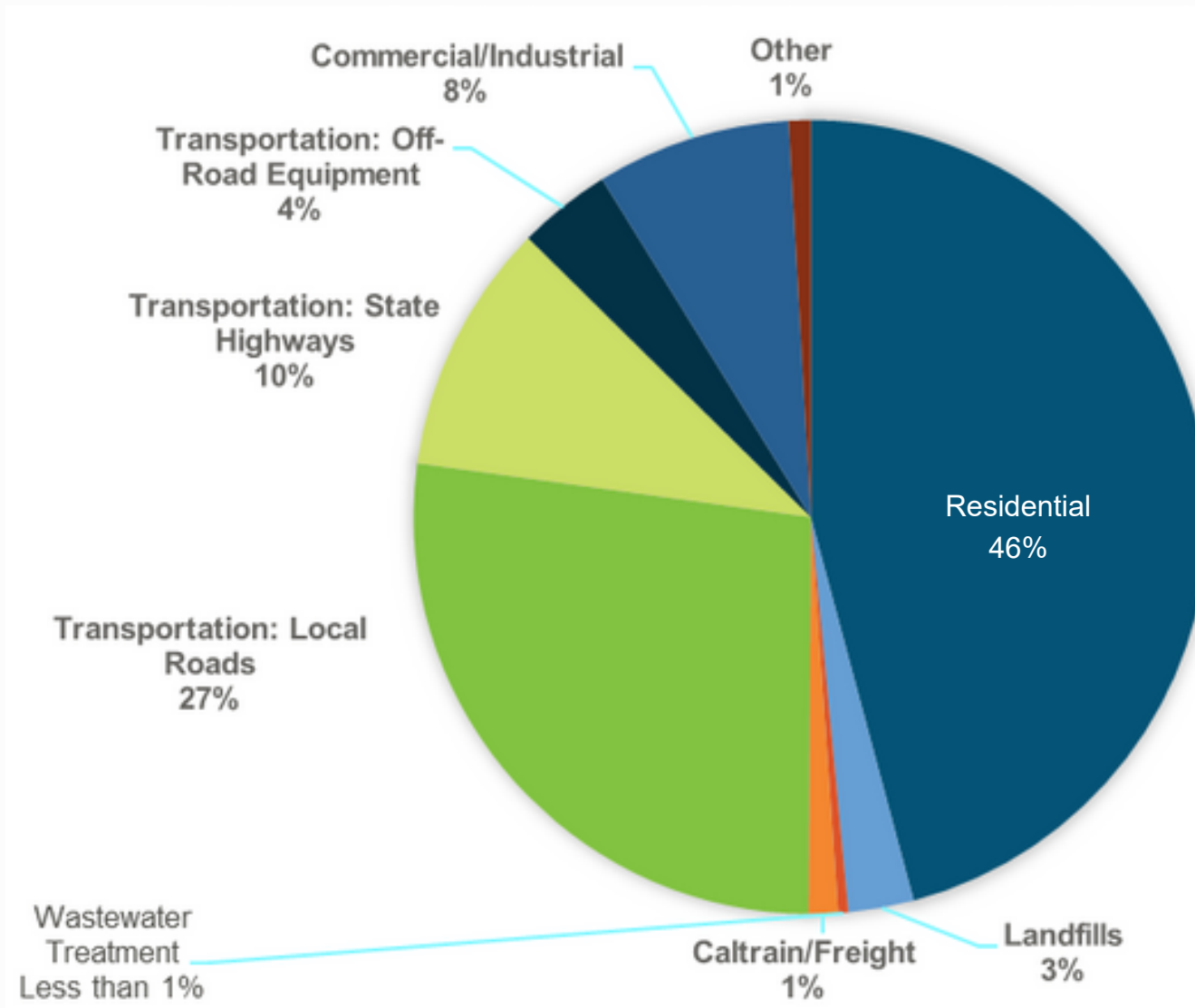
# WHAT'S NEW?

## 2023 CLIMATE ACTION PLAN UPDATES

- A vision for a carbon-neutral Atherton with two key milestones:
  - 49% reduction of 2005 levels by 2030 (equivalent to a 40% reduction of 1990 levels) aligning with SB 32 (2016)
  - 100% reduction of 2005 levels by 2045 aligning with B-55-18 (2018) and AB 1279 - California Climate Crisis Act (2022)
- Expanded our objectives and strategies to achieve these more ambitious goals including adding Carbon Sequestration as a focus area
- Introduced strategies to reduce emissions from consumption




# 2019 GREENHOUSE GAS EMISSION INVENTORY






# NEW CLIMATE ACTION PLAN DASHBOARD



DASHBOARDCLIMATE ACTION PLANIMPLEMENTATIONWHAT YOU CAN DO



Credit: Leo Leung 4.22.2023

## Atherton Climate Solutions

### The Road to a Resilient Net Zero Future

Welcome to the Town of Atherton CA Climate Action Plan Dashboard. Discover what the Town is doing to reduce climate change and track our progress.

↓

[www.tinyurl.com/AthertonCA](http://www.tinyurl.com/AthertonCA)

# ENERGY

	Objective	2030 Goal	2045 Goal
E 1	Electrify new construction	100% of new construction is all-electric	Maintain 100% of new construction as all- electric
E 2	Electrify existing buildings	26% of existing buildings are electrified	78% of existing buildings are electric
E 3	Promote use of clean energy	Maintain Peninsula Clean Energy's (PCE) opt-out rates at 3%	Maintain a 3% or less opt out rate



Left: Heat pump water heater, Right: Heat pump HVAC system

The sale of new NOx-emitting natural gas furnaces and water heaters will be phased out over time in the Bay Area, beginning with water heaters in 2027 (per BAAQMD's amendment to Regulation 9, Rules 4 and 6).



# KEY STRATEGIES

## E1. ELECTRIFY NEW CONSTRUCTION

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.

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.



Ample programs available offering financial incentives and technical/engineering support to help electrify buildings

# KEY STRATEGIES

## E2. ELECTRIFY EXISTING BUILDINGS

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 Peninsula Clean Energy 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.

Create policies to advance the adoption of electric appliances and systems in existing buildings

Explore electrification ordinances requiring:

- 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.
- All buildings be electric-ready at the time of retrofit.
- All air conditioning units to be replaced with heat pumps at time of burn out.
- Solar and battery storage installations, if feasible.



# KEY STRATEGIES

## E3. PROMOTE USE OF CLEAN ENERGY

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.

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

	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%.



Featured photos: Residents exploring different options for bicycles, electric vehicle chargers at Town Center, and a digital rendering of SamTrans' fleet which will be all electric by 2034.



# KEY STRATEGIES

## T1. DECARBONIZE PASSENGER & COMMERCIAL VEHICLES AND OFF ROAD EQUIPMENT

Decarbonize the Town's vehicle fleet

Prioritize the purchase of electric vehicles and other alternative fuel vehicles where they meet the 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.

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.

# KEY STRATEGIES

## T2. PROMOTE TRIP REDUCTIONS, BIKING, WALKING, ROLLING, AND TAKING TRANSIT THROUGH AND IN TOWN

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.

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.



# SOLID WASTE

	Objective	2030 Goal	2045 Goal
W 1	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
W 2	Eliminate single use plastics	Achieve zero plastic waste in municipal operations	Achieve zero plastic waste in the community
W 3	Promote waste diversion through home composting, reducing, reusing, and recycling	Reduce all waste by 35%	Reduce all waste by 90% by 2040



Featured photos: Pilot to apply compost on San Mateo County farmlands to meet our SB 1383 goals, providing opportunities to properly dispose of and reuse items through community events, and an example of reusable foodware for school lunches

## KEY STRATEGIES

### W1. IMPLEMENT SB 1383 REQUIREMENTS TO DIVERT ORGANIC WASTE, REDUCE INORGANIC WASTE, AND PROCURE COMPOST.

#### 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.

#### Conduct waste characterization studies

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.

# KEY STRATEGIES

## W2. ELIMINATE SINGLE USE PLASTICS

### Form SB 1383 Partnerships

Establish partnerships with institutions and businesses that are major generators of food waste, and track major updates and metrics for success annually.

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.



## KEY STRATEGIES

### W3. PROMOTE WASTE DIVERSION THROUGH HOME COMPOSTING, REDUCING, REUSING, AND RECYCLING

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.

Strengthen community composting

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.

# CARBON SEQUESTRATION AND WATER CONSERVATION

	Objective	2030 Goal	2045 Goal
C 1	Increase the community's tree canopy	Plant 650 trees	Plant 1,500 trees
C 2	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
C 3	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)
C 4	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



Featured photos: An Atherton resident's water wise landscape, community tree planting at Holbrook Palmer Park, and the Atherton Library leading by example showcasing low carbon building materials

# KEY STRATEGIES

## C1. INCREASE THE COMMUNITY'S TREE CANOPY

Track data on tree health

Survey and collect data on existing trees, including tree maintenance and replacement.

Maintain urban tree canopy

Dedicate staff time and resources to maintaining urban tree canopy (pruning, replacement, and preservation)



## KEY STRATEGIES

### C2. EXPLORE CARBON SEQUESTRATION OPPORTUNITIES IN THE COMMUNITY

Identify emergent carbon sequestration opportunities

Conduct a carbon sequestration feasibility study by 2030 to identify urban and natural working land opportunities and emergent technology for carbon sequestration within the community.

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.

## KEY STRATEGIES

### C3. REDUCE EMBODIED CARBON IN BUILDING MATERIALS

#### 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.

#### 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.

## KEY STRATEGIES

### C4. CONSERVE WATER IN BOTH LANDSCAPING AND IN BUILDINGS

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.

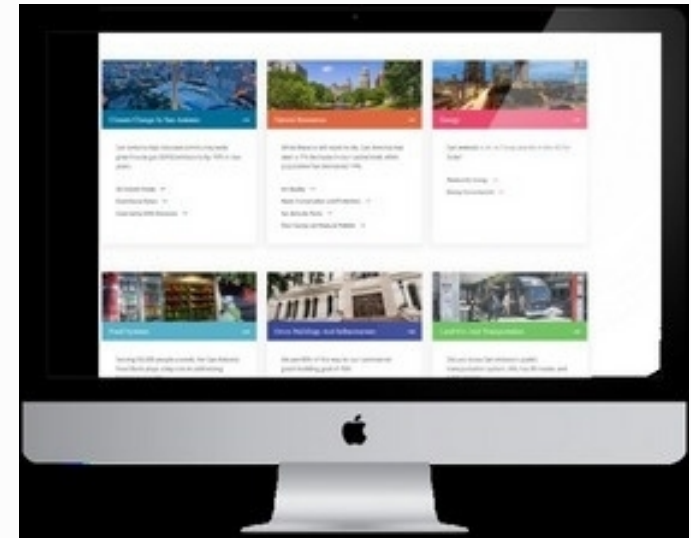
Adopt water conservation ordinance

Adopt, implement, and enforce the Bay Area Water Supply and Conservation Agency's (BAWSCA) Model Water Efficient Landscaping Ordinance.



# SPRINGING INTO ACTION

- Hone in on opportunities with Town operations
- Deepen partnerships with local energy programs to support schools and homeowners
- Expand green landscaping offerings with compost giveaway, electric leaf blower rebates, rain barrel rebates, and more.
- Publicize new data-driven climate action hub custom for Atherton community members
- Pursue grant funding and assistance



*Engaging residents with data, stories, and actionable resources*



*Residents digging into the self service organic compost pile at Holbrook Palmer Park*



## Recommendation

- Review and discuss the 2023 Climate Action Plan Update
- Adopt Plan as an update to the 2016 Plan and Authorize Submittal of CEQA Notice of Exemption





# THANK YOU!

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# SUPPLEMENTAL SLIDES

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# 2016 CLIMATE ACTION PLAN



- Established a comprehensive strategy to reduce GHGs to 15% of 2005 levels (approx. the equivalent of 1990 levels) by 2020
- Identified GHG reduction strategies and implementation strategies to achieve GHG reduction target



## Climate Successes



~13% of our  
emissions reductions

Joined Peninsula Clean Energy to provide 100% greenhouse gas free electricity to the community.



~2% of our emissions  
reductions

Improved bike infrastructure and installed electric vehicle chargers to promote clean transportation

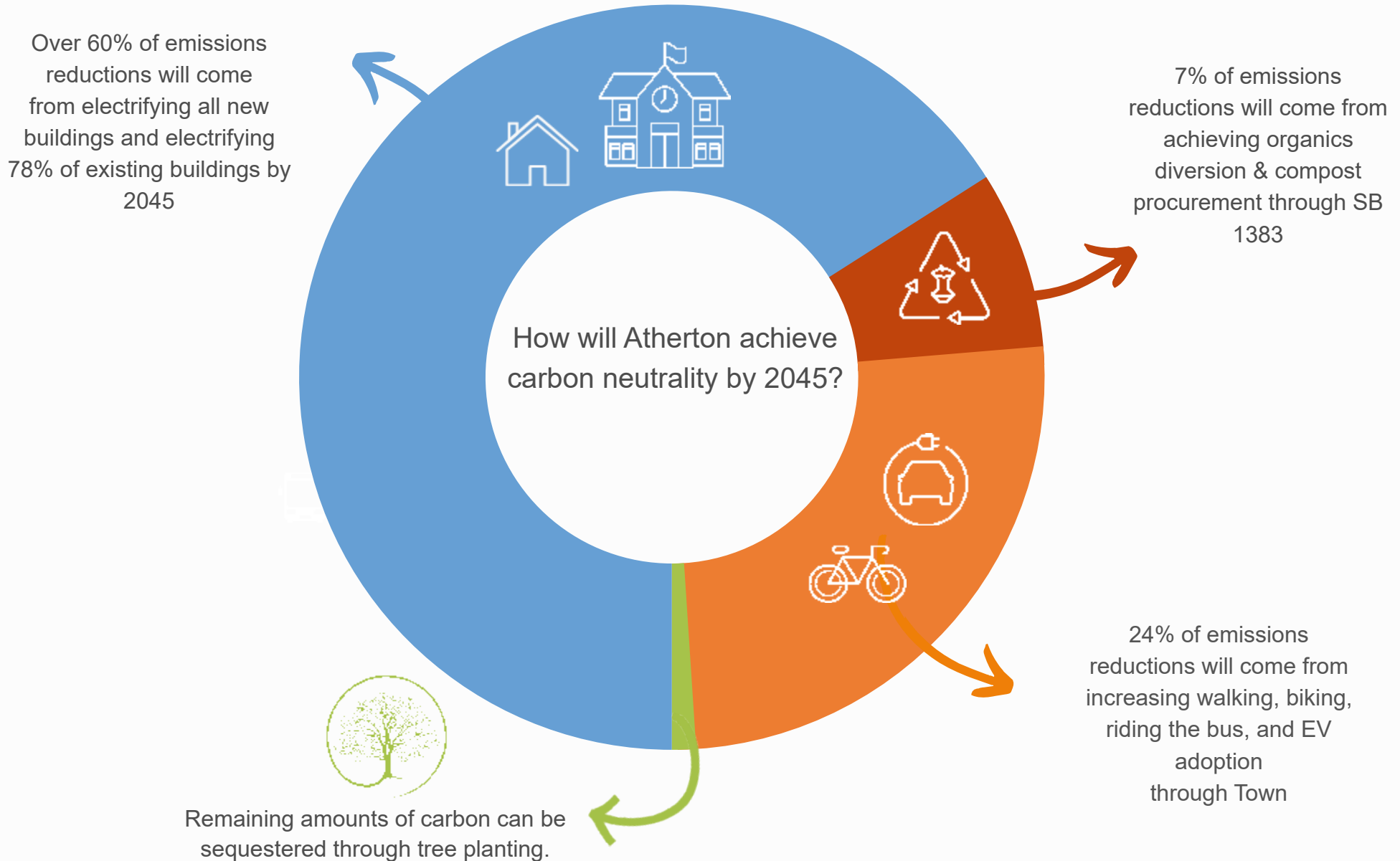


~5% of our emissions  
reductions

Established organic waste program turning yard and food waste into compost that is being used locally

These successes among others led to the Town to exceed its 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

# GHG REDUCTION STRATEGIES





## Optional Statement:

The CAP serves as a vision for a climate-neutral community and is aspirational in nature. Completion of all of the strategies in the CAP may not achieve actual zero emissions but will get the Town close.

Some of the strategies may be explored and/or piloted, but ultimately, may not yield the intended results. It is not a requirement that all strategies need to be implemented. There is flexibility. Additionally, each policy recommendation in the CAP will need to go through its own public process.

There will be annual status updates, tracking, monitoring, and reporting in order to assess the plan's impact.

# CAP UPDATE PROCESS

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GREENHOUSE GAS EMISSION INVENTORY



FORECAST



EXISTING AND PLANNED EFFORTS



GHG

IMPLEMENTATION STRATEGY

STRATEGIES



DRAFT 2023 CAP UPDATE

# Peninsula Clean Energy's Resiliency Plan (January 2020)



