Item No. 4
Town of Atherton

CITY COUNCIL STAFF REPORT – STUDY SESSION

TO: **HONORABLE MAYOR AND CITY COUNCIL**
GEORGE RODERICKS, CITY MANAGER

FROM: **DOUGLAS KIM, SUSTAINABILITY COORDINATOR**

DATE: **NOVEMBER 3, 2021**

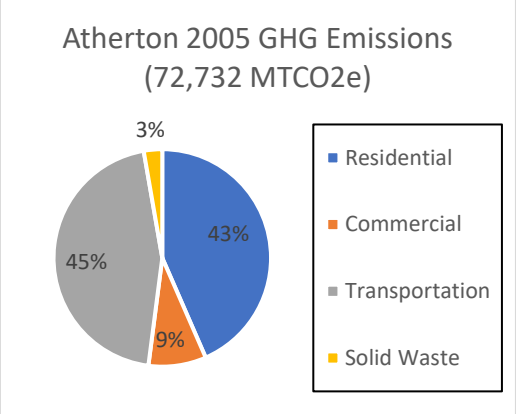
SUBJECT: **CLIMATE ACTION PLAN PROGRESS REPORT.**

RECOMMENDATION

Receive and file a five-year Progress Report on the Town's implementation of the 2016 Climate Action Plan.

BACKGROUND

Atherton generated 72,732 metric tons of carbon dioxide equivalent (CO_2e) emissions from manmade sources in 2005. In 2016, Atherton adopted its first ever Climate Action Plan (CAP) to reduce these greenhouse gases (GHG) and support State and national efforts to address global climate change.



The CAP set a target 15 percent reduction in 2005 emissions by 2020 to be in line with the requirements of AB 32, which aimed to reduce the State's GHG emissions to 1990 levels by 2020. The CAP also set a 49 percent reduction below 2005 levels by 2030. This more ambitious target is aligned with SB 32, which calls for reducing GHG by 40 percent below 1990 levels by 2030.

The CAP included 25 measures focused on three local sources of GHGs that could be addressed directly by the Town or by its residents and institutions. First, it included fourteen Energy and Water measures aimed to reducing consumption from existing and new buildings. These were often voluntary measures asking homeowners to consider greener technologies when building or remodeling homes. Second, the CAP included five Transportation and Land Use measures designed to reduce reliance on vehicles, as well as a move toward alternative fueled cars. Third, it included six Solid Waste measures that built off diversion requirements in AB 939 by raising goals for recycling and composting in residential, commercial, and governmental operations.

Table 1
2016 Climate Action Plan GHG Reduction Targets

Measure	Overview	CO_2e Reduction Target (Metric Tons)	
		2020	2030
EC1	Voluntary residential green building ordinance for new construction	81	74
EC2	Incorporate Energy Upgrade programs and similar rebate	291	458
EC3	Implement program for residential shade trees		111
EC4	Voluntary commercial green building ordinance	7	19
EC5	Promote PG&E commercial energy efficiency/demand response programs	129	101
EC6	Community Choice Aggregation	2,797	4,295
EM1	Energy efficient street lighting	6	4
EM2	Environmentally preferred purchasing policy- Energy	2	1
EM3	Renewable energy installation on municipal property	29	12
EM4	Energy efficiency in municipal buildings	105	61
EM5	Implement municipal program for shade trees	3	2
WTRC1	Water conservation incentives	64	93
WTRC2	Water conservation ordinance	58	84
WTRC3	Voluntary water conservation programs	1	1
TRC1	Implement Bike Pedestrian Master Plan	233	198
TRC2	Implement Safe Routes to School	119	162
TRM1	Efficient fleet policy	4	7
TRM2	Flexible schedules	31	30
TRM3	Explore Town participation in County-wide rideshare or bus program	1	1
WC1	Set higher community waste diversion goal	1,253	1,253
WC2	Require commercial recycling through mandatory ordinance	Supporting	Supporting
WC3	Promote recycling of yard waste	Supporting	Supporting
WM1	Create Sustainable Vendor Policy for public events	Supporting	Supporting
WM2	Environmentally preferred purchasing policy	Supporting	Supporting
WM3	Zero waste policy in governmental operations	Supporting	Supporting
Total GHG Reductions		**5,275**	**6,967**

As summarized in Table 1, the CAP estimated these measures would reduce 5,275 metric tons by 2020, which would meet and exceed its goal of a 15 percent reduction from 2005 levels. Over 53 percent of these GHG reductions would come from moving residents and institutions to greener energy sources through Community Choice Aggregation. Reducing solid waste disposal was another key measure for reducing GHG emissions. These CAP also identified how to reduce 6,967 tons of GHG by 2030, but acknowledged that more would be needed to achieve the CAP's ambitious 2030 goals.

In January 2017, the City Council prioritized 16 of these measures, noting that the remaining nine measures remain pertinent to the CAP's overall objectives. These included the following priorities:

1. Residential Energy Measure EC2: Incorporate available Energy Upgrade programs and similar rebates

2. Green Building measures:
    a. EC1: Voluntary residential green building ordinance for new construction
    b. EC4: Voluntary commercial green building ordinance for new construction and major additions
    c. EM4: Energy efficiency in municipal buildings
3. Community Choice Aggregation Measure EC6
4. Bicycle and Pedestrian Master Plan measures:
    a. TRC1: Implement the Town's Bicycle and Pedestrian Master Plan faster to create a walkable/bikeable street landscape
    b. TRC2: Fund and implement Bicycle Master Plan priorities and make having safe routes to school a priority
5. Waste Management measures
    a. WC1: Set higher community waste diversion goals
    b. WC2: Require commercial recycling through mandatory ordinance
    c. WC3: Promotion of recycling/diversion of yard waste
    d. WM1: Create Sustainable Vendor Policy for public events
    e. WM2: Environmentally preferred purchasing policy-waste reduction
    f. WM3: Approach a zero waste policy in government operations
6. Water Conservation measures
    a. WTRC1: Water conservation incentives
    b. WTRC2: Water conservation ordinance
    c. WTRC3: Voluntary. Water conservation programs

ANALYSIS

Since adoption of the CAP, several developments have helped reduce the Town's carbon footprint and advance the objectives of the Plan. These include:

Overall: Met 2020 GHG Reduction Target

Based on the County of San Mateo's Regional Climate Action Planning Suite (RICAPS), Atherton met its 2020 GHG goal of a 15 percent reduction from 2005 levels by 2020. As of 2019, the Town had reduced 19,654 metric tons of CO_2e, a 28.8 percent reduction from 2005 levels (Table 2).[1] The majority of reductions were from the use of cleaner fuels and vehicles, as well as the community's shift to cleaner energy sources via Peninsula Clean Energy (PCE), reducing 70.7 percent of GHG emissions from electricity use.

[1] While 2020 emissions estimates are not ready, they are not expected to increase from the prior year, especially given the reduction in activity from pandemic lockdown restrictions.

Table 2
Atherton GHG (CO_2e) Emissions 2005-2019 (metric tons)

Sector	Source		2005	2019	Change	Percent
Energy	Residential	Electricity	10,791	3,163	-7,628	-70.7%
		Natural Gas	20,817	21,161	344	1.7%
	Commercial	Electricity	3,139	996	-2,143	-68.3%
		Natural Gas	3,108	3,203	95	3.1%
	Direct Access	Electricity	0	435	435	N/A
	Stationary Sources	Multiple Fuels	0	36	36	N/A
Transportation	Local Roads	Gasoline	22,225	12,562	-9,663	-43.5%
		Diesel	2,031	1,805	-226	-11.1%
	State Highways	Gasoline	6,019	4,751	-1,268	-21.1%
		Diesel	550	683	133	24.2%
	Off-Road Equipment	Off-Road Equipment	2,057	2,012	-45	-2.2%
	Rail	Caltrain		558	558	N/A
		Freight Trains		78	78	N/A
Solid Waste	Solid Waste Disposal	Landfilled Waste	1,923	1,417	-506	-26.3%
		ADC	72	0	-72	100.0%
		Landfills	0	0	0	N/A
Wastewater	Wastewater Treatment	Wastewater Treatment	0	215	215	N/A
Water	Water Use	Water Use	0	3	3	N/A
Total			72,732	53,078	-19,654	**-28.8%**

Note: Total percent reduction excludes source categories with no data in 2005
Source: County of San Mateo RICAPS database, 2021

Energy: Switched to Greener Energy (Measure EC6)

A major element of the CAP was to tackle the substantial GHG emissions from energy use in the Town. Since 2016, 98 percent of the Atherton community has chosen to use Peninsula Clean Energy, opting for the ECO Plus service that provides nearly 100 percent of its electricity from carbon-free sources. By calling on the use of wind, solar, and hydroelectric sources for its electricity, Atherton has reduced 71 percent of its GHG emissions from 2005 levels from residential electricity consumption, helping to address CAP Measure EC6, which focused on the use of Community Choice Aggregation. Further, most ratepayers have seen reductions in prior utility bills with PG&E, with about $358,000 in savings citywide.

Solid Waste: Focused on Reducing Organic Waste (Measures WC1, WC3, WM1, WM2, WM3)

The CAP included five measures designed to divert more waste from landfills, including a focus on reducing organic waste, which makes up half of the State's landfills. In response to recent State law (SB 1383) which calls for a 75 percent reduction in landfill organic waste by 2025, the Town

has worked with its new waste hauler GreenWaste Recovery to redirect compostable materials from landfills. Atherton has developed a partnership with the County of San Mateo to implement and enforce these requirements.

In addition, SB 1383 requires a 20 percent reduction in disposal of edible food from schools and institutional uses in Atherton by 2025. The Town is working with these stakeholders to redirect food away from landfills.

Transportation: Continued Shift to Zero Emission Vehicles (Measure TRM1)

A key strategy for reducing GHG emissions is to transition from gas-fueled vehicles to zero-emission cars for the Town's fleet and the general public. From 2012 to 2018, residents increased their use of electric vehicles twelve-fold, from 148 in 2012 to 1,823 in 2018, now representing about five percent of cars citywide. Like most cities, the rate of electric vehicle use will need to increase substantially to support California's climate action plan, which calls for four million zero emission cars on the roads by 2030.

Solid Waste: Began to Phase Out Disposable Food Service Ware (Measures WC1, WC3, WM1, WM2, WM3)

Another source of landfill materials is single-use plates, utensils, and other food service ware at schools and institutions. Following the County's lead, the Town adopted an ordinance that substantially reduces the use of this disposable ware at schools and clubs that serve food and at public events. This includes offering compostable or recyclable ware upon request by customers. Recently-signed State legislation (AB 1276) also calls for these types of programs.

SUMMARY

Achieving the CAP's GHG target for 2020 is an important step in the Town's long-term quest to support climate change policy across California, the nation, and the world. However, it is just the start of addressing all the CAP's objectives and the 25 local measures.

Specifically, the CAP calls for a major cut in GHG emissions by 2030 with a target 49 percent reduction below 2005 levels. This target was set to support the State's objectives from SB 32. While continued implementation of State measures and the reductions from PCE's clean energy programs can meet most of the target, local City measures will need to reduce about 25,000 metric tons of CO_2e by 2030, based on estimates from the County's Office of Sustainability. The CAP acknowledged that more measures will be needed to achieve these 2030 targets.

Further, the State and many jurisdictions are looking at more stringent goals such as a net zero policy where a jurisdiction emits no net GHGs. The California Air Resources Board commissioned a recent study showing that such a carbon neutrality effort could be met by 2045. If the Town were to pursue a similar objective, more stringent measures will be needed to not only meet the 2030 target, but any additional goals as well.

To that end, more consensus and support will be needed to implement all 25 measures in the 2016 CAP. To date, some of these measures have not been implemented due to funding, lack of consensus, and other constraints. Table 3 in the attached Climate Action Plan Progress Report

(Attachment 1) summarizes the status of each of the CAP's measures. Staff will work to advance each measure as feasible, focusing on the priority measures identified by the City Council.

NEXT STEPS

As the CAP is a living document, potential updates and refinements to the Plan will be considered based on evolving circumstances. First, the Town will work with the County Office of Sustainability to confirm the GHG emissions inventory for 2020 and what the updated forecasts are through 2030 and beyond. The results will be reported to the City Council and used to help ascertain what changes to the CAP are appropriate to ensure continued progress toward future targets. As noted earlier, the 2016 CAP recognized that more measures would be needed to achieve the 2030 target. Second, staff will continue to implement the measures from the 2016 CAP and assess whether refinements are needed to advance the local programs targeting energy, water, solid waste, land use, and transportation sources.

FISCAL IMPACT

Implementation of some CAP measures will continue to require financial and other resources.

GOAL ALIGNMENT

This report and its contents are in alignment with the following Council Policy Goals:

- Goal E – Strengthen Community Engagement and Transparency
- Goal F – Be Forward-Thinking, Well-Managed, and Well-Planned

PUBLIC NOTICE

Public notification was achieved by posting the agenda, with this agenda item being listed, at least 72 hours prior to the meeting in print and electronically. Information about the project is also disseminated via the Town's electronic News Flash and Atherton Online. There are approximately 1,400 subscribers to the Town's electronic News Flash publications. Subscribers include residents as well as stakeholders – to include, but be not limited to, media outlets, school districts, Menlo Park Fire District, service provides (water, power, and sewer), and regional elected officials.

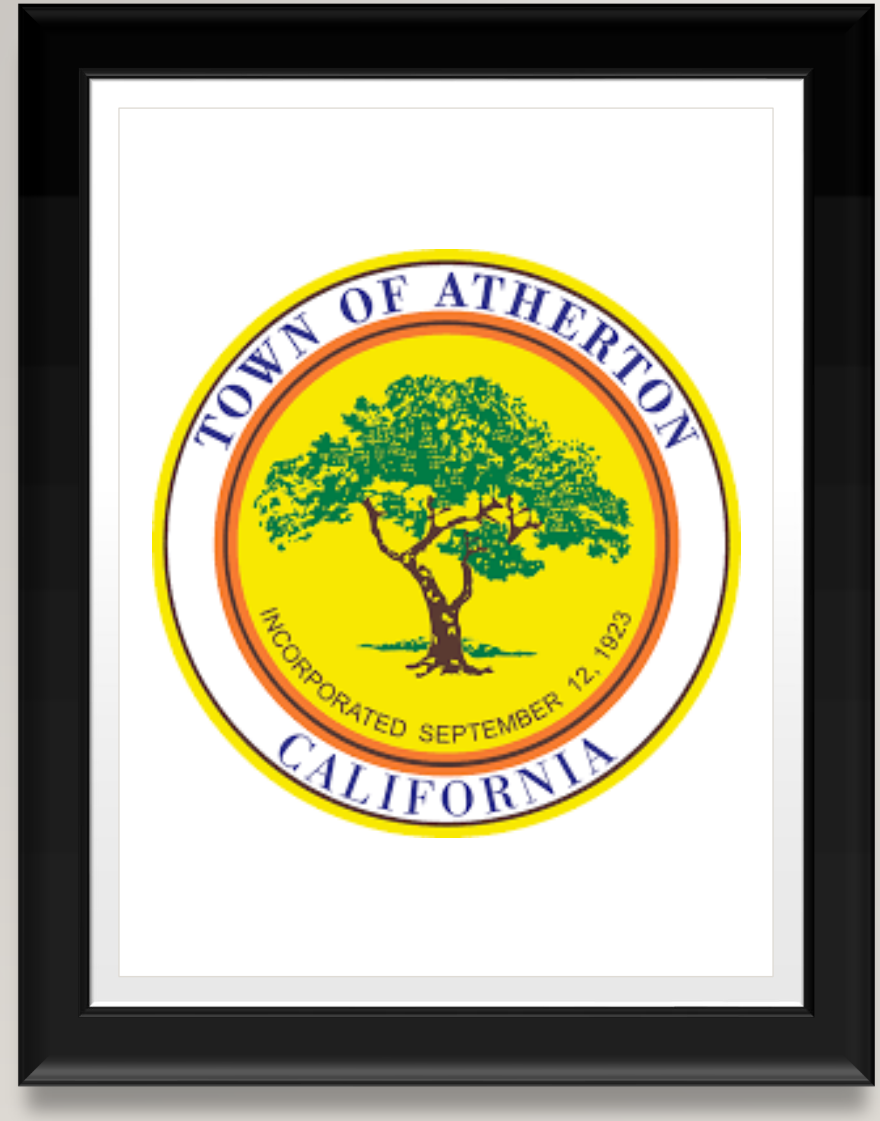
COMMISSION/COMMITTEE FEEDBACK/REFERRAL

This item __X__ has or ___ has not been before a Town Committee or Commission.

____ Audit/Finance Committee (meets every other month)
____ Bicycle/Pedestrian Committee (meets as needed)
____ Civic Center Advisory Committee (meets as needed)
_X__ Environmental Programs Committee (meets every other month)
____ Park and Recreation Committee (meets each month)
____ Planning Commission (meets each month)
____ Rail Committee (meets every other month)
____ Transportation Committee (meets every other month)

ATTACHMENT

1. Climate Action Plan Progress Report

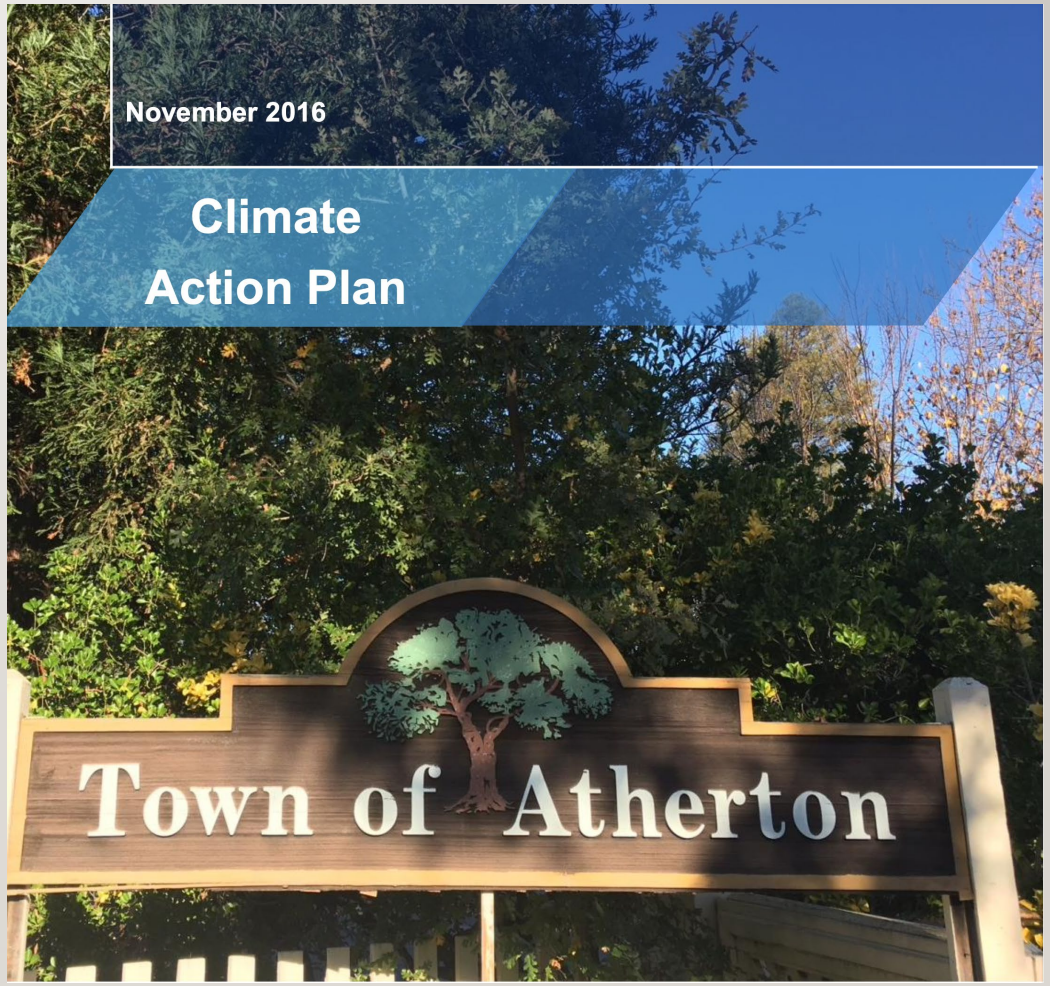


CLIMATE ACTION PLAN PROGRESS REPORT

NOVEMBER 3, 2021

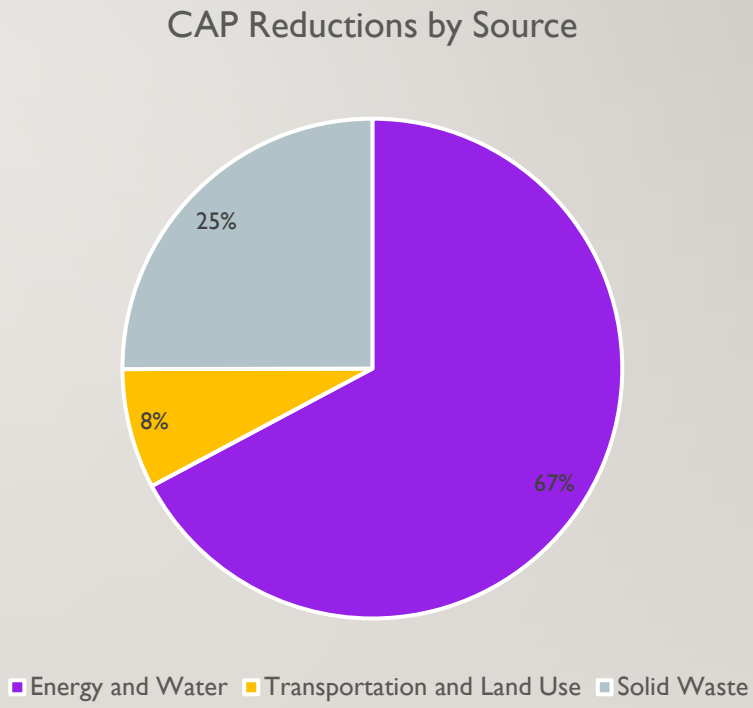
BACKGROUND

- Adopted 2016
- Reduce GHGs to Support State Climate Change Plans
  - 2020: 15% reduction from 2005 levels
  - 2030: 49% reduction from 2005 levels
- 25 measures
- Living document



CAP MEASURES

- Energy and Water
  - 14 measures
  - 3,364 tons in 2020
- Transportation and Land Use
  - 5 measures
  - 388 tons in 2020
- Solid Waste
  - 6 measures
  - 1,253 tons in 2020



CAP OVERVIEW

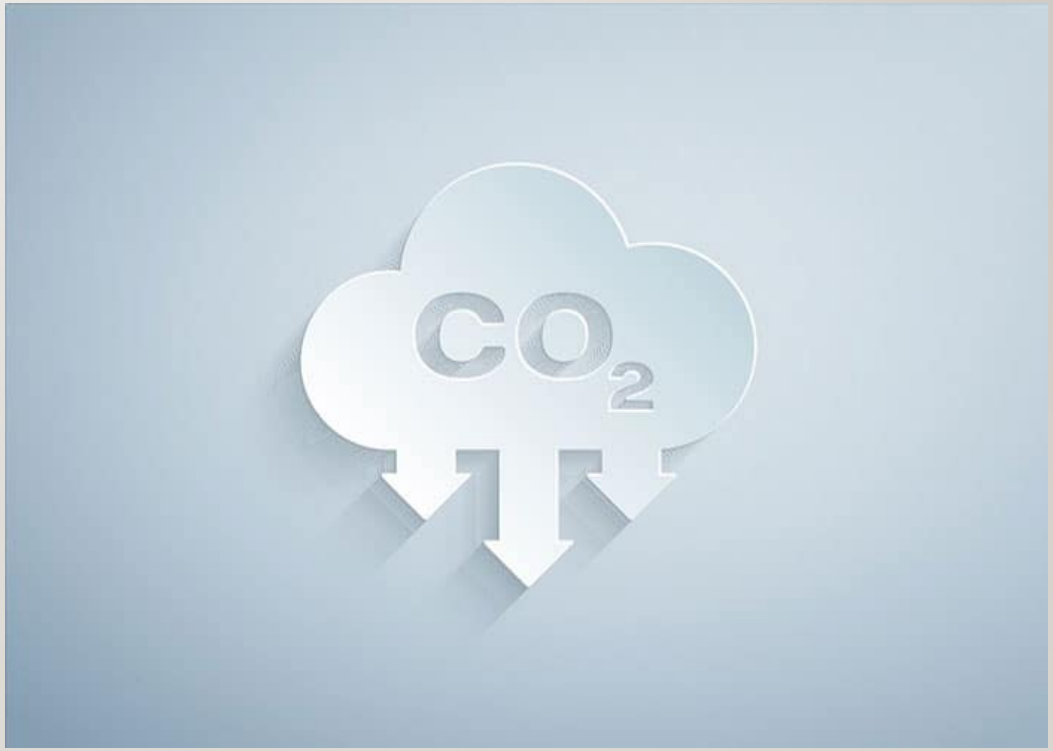
- Measures directly controlled by the Town
- Measures calling for voluntary "green" choices in building construction, remodels
- Recognizes that other measures outside the Town will continue

ACCOMPLISHMENTS (2016-2021)

- Achieved Short-Term GHG Reduction Goals
- Switched to Greener Energy
- Reducing Organic Waste
- Shifted Toward Electric Vehicles
- Phasing Out Disposable Food Service Ware

ACHIEVED SHORT-TERM GHG REDUCTION GOALS

- Target: Reduce GHG by 15% by 2020
- Result: Reduced GHG by 28.8% by 2019
- How:
  - 70% reduction from residential electricity
  - 68% reduction from commercial electricity
  - 44% reduction from local traffic



SWITCHED TO GREENER ENERGY

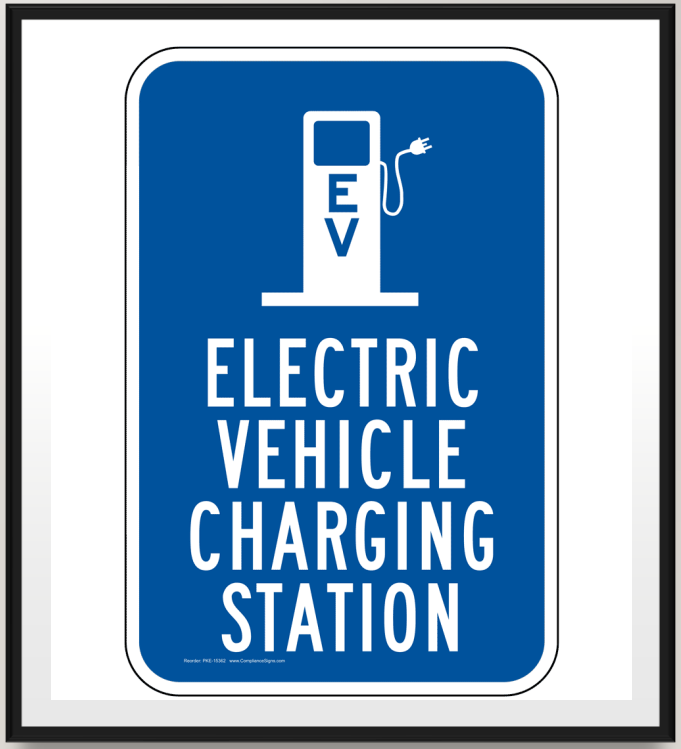
- 98% of Atherton has switched to Peninsula Clean Energy
- Nearly 100% carbon-free sources
- Saves $358,000 in utility bills citywide

REDUCING ORGANIC WASTE

- Focus on reducing organic waste
- Organic waste 50% of our landfills
- Recent State law (SB 1383)
  - Requires 75% reduction in landfilled organic waste by 2025
  - Requires 20% cut in disposal of edible food by 2025

SHIFTED TOWARD ELECTRIC VEHICLES

- Electric vehicle population grew 12x from 2012-2018
- Now 5% of cars citywide
- Hybrid-electric vehicle sales also increased 16%
- Police Department investing in hybrid electrics, looking at patrol cars as early as 2023



PHASING OUT DISPOSABLE FOOD SERVICE WARE

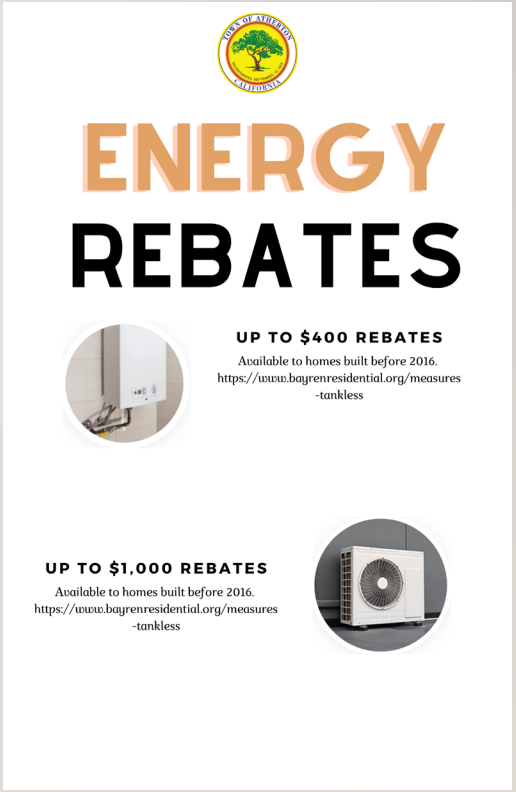
- Working to reduce single-use, disposable food service ware at food facilities
- Items only upon request, must be compostable
- Partnership with County

CHALLENGES LIE AHEAD

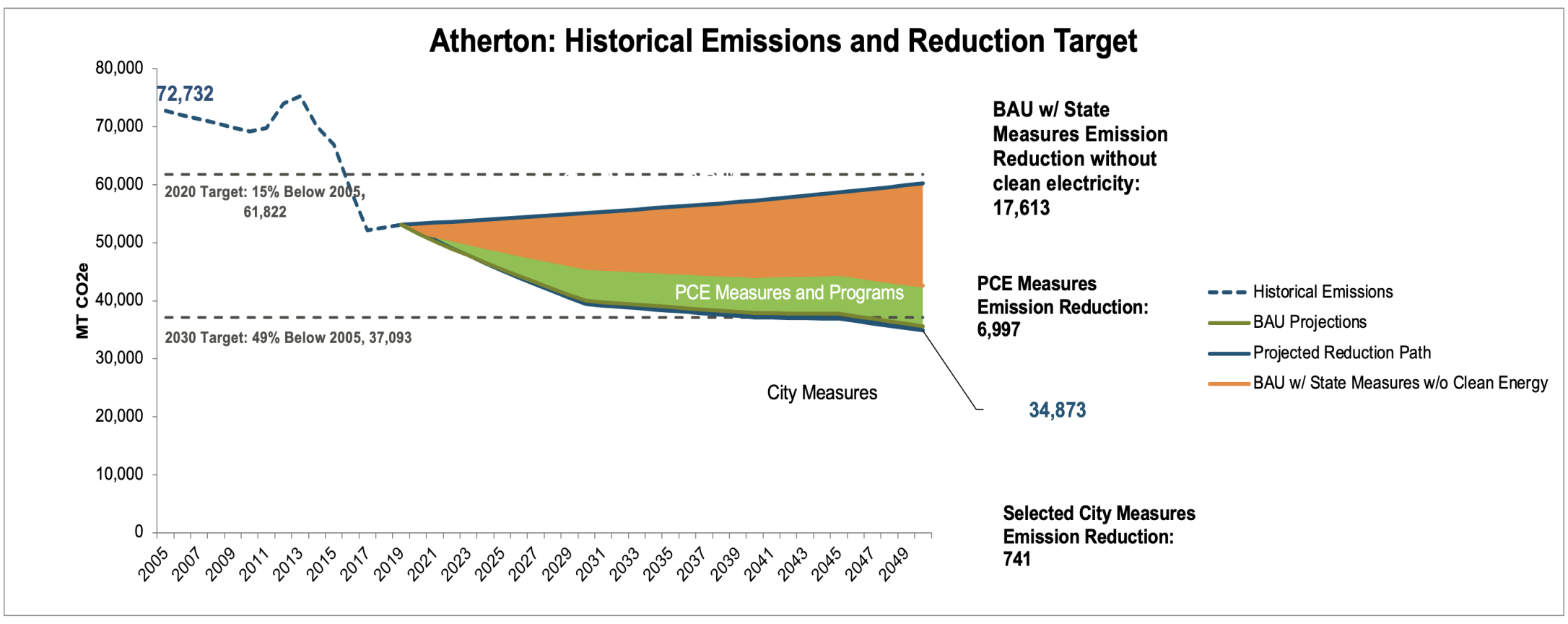
- 2030 Target
  - 90% can be achieved through State and outside measures
- Net Zero Will Be Challenging
  - Does Town want to go there (2045)?
- Implementing 25 CAP Measures, particularly voluntary

PUBLIC OUTREACH

- Electronic
  - Website
  - Email blasts
  - Social media
- Print
  - Flyers at Building counter
- Promoting rebates
- Education on return-on-investment



FUTURE TARGETS



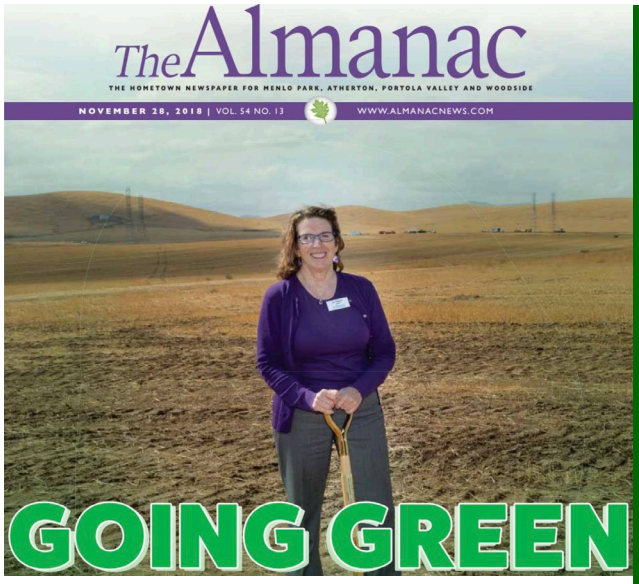
CAP UPDATE

- CAP will need update
  - To meet 2030 target
  - Refine measures/reductions
  - Could be 2022, working with County

NEXT STEPS

- Work with County
  - Confirm 2020 GHG Emissions
  - Clarify 2030 GHG Forecast
- Update CAP for 2030 Target, update in 2022
- Implement Balance of CAP Measures
  - Outreach, tracking

Town of Atherton



FOODWARE AWARE

REUSE. CHOOSE. REFUSE.

Climate Action Plan Progress Report November 2021

Five Years of Progress

In 2016, the Town of Atherton adopted its first ever Climate Action Plan (CAP), a blueprint for how we could think globally and act locally about climate change. The CAP looked at how Atherton can reduce its carbon footprint, with a number of local measures asking the community to think greener. It also included a call to work with other local jurisdictions on solutions that are better solved at a County or even State level. It is an aspirational plan that defines success by setting voluntary targets. But it's also a living document that's intended to change and grow as circumstances warrant.

The CAP included 25 strategies designed to reduce greenhouse gases (GHG) from energy and water, transportation and land use, waste reduction and recycling.[1] As shown in Table 1, 67 percent of these GHG reductions were aimed at reducing energy and water consumption.

While many emissions are generated by sources like motor vehicles whose emissions are governed by State clean engine and gasoline standards, the CAP's measures focused on voluntary and mandatory measures designed to change how we live, work, and play.

Table 1
Climate Action Plan GHG Targets

Source	Target GHG Reductions (metric tons)	
	2020	2030
Energy and Water	-3,364	-5,316
Transportation and Land Use	-388	-398
Waste Reduction and Recycling	-1,253	-1,253
Total	-5,005	-6,967

Many of these measures rely on residents and institutions voluntarily going beyond business as usual and make greener decisions. For example, urging residents to consider going beyond Title 24 and

[1] This report uses the term GHG to refer to carbon dioxide equivalents (CO_2e), the amount of CO_2 emissions adjusted by the global warming impact of various GHGs.

CALGreen building codes when remodeling is a key opportunity to reduce energy use in our homes. Many of the CAP's measures rely on public education to provide the information residents and businesses need to evaluate their options. win/win outcomes, as well as promotion of the many rebates and incentives to go green.

The purpose of this status report is to document where the Town is in 2021 and recognize that the CAP is a living document that will need to pivot. In the five years since the CAP's adoption, the world has changed in unprecedented ways. Nevertheless, the Town has advanced its sustainability programs and achieved substantial results that are documented in this five-year status report.

1. Achieved Short-Term GHG Reduction Goals

The Town reduced its GHG emissions 28.8 percent reduction below 2005 levels by 2019[2], meeting and exceeding its goal of reducing emissions 15 percent by 2020. This target was set to help California meet its objectives under AB 32 and is the first of several important milestones to ultimately become a carbon-free community.[3] The majority of these changes came from use of cleaner fuels and cleaner sources of electricity (Table 2). These changes have helped reduce Atherton's carbon emissions by 19,654 metric tons from 2005 to 2019.

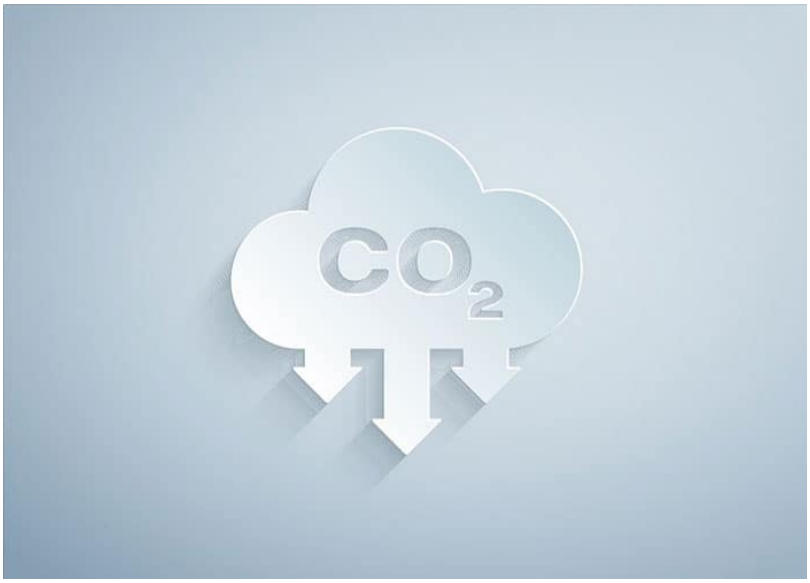


Table 2
Atherton GHG Emissions 2005-2019 (metric tons)

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Transportation	Local Roads	Gasoline	22,225	12,562	-9,663	-43.5%
		Diesel	2,031	1,805	-226	-11.1%
	State Highways	Gasoline	6,019	4,751	-1,268	-21.1%

[2] From County of San Mateo Sustainability Office, based on 2019 emission inventory. 2020 estimates pending.
[3] AB 32 set a goal of reducing the State's GHG emissions to 1990 levels by 2020.

		Diesel	550	683	133	24.2%
	Off-Road Equipment	Off-Road Equipment	2,057	2,012	-45	-2.2%
		Caltrain		558	558	N/A
	Rail	Freight Trains		78	78	N/A
Solid Waste		Landfilled Waste	1,923	1,417	-506	-26.3%
		ADC	72	0	-72	-100.0%
	Solid Waste Disposal	Landfills	0	0	0	N/A
Wastewater	Wastewater Treatment	Wastewater Treatment	0	215	215	N/A
Water	Water Use	Water Use	0	3	3	N/A
Total			72,732	53,078	-19,654	**-28.8%**
Note: Total percentage reduction does not include source categories with no data in 2005 Source: County of San Mateo RICAPS database, 2021						

Figure 1 illustrates how GHG emissions from the five key sources of carbon emissions in the city have changed over time.

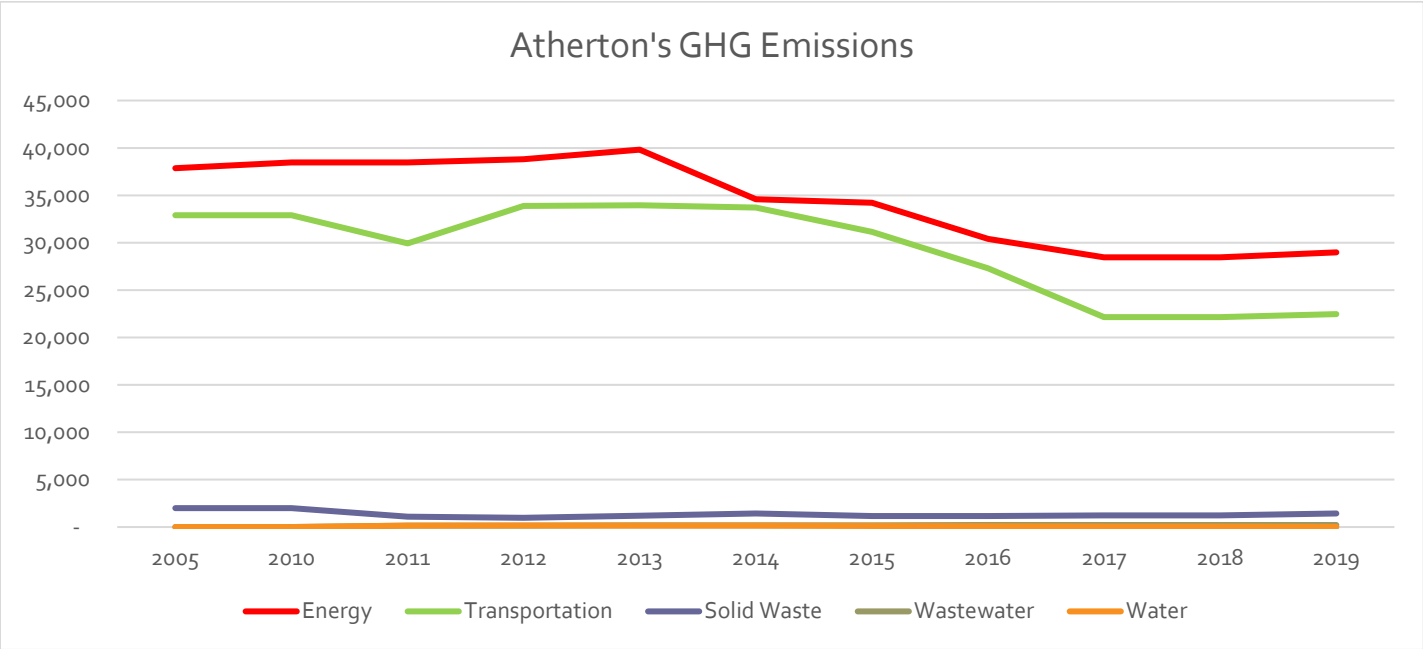


Figure 1
Atherton's GHG Emissions 2005-2019

What's Next?

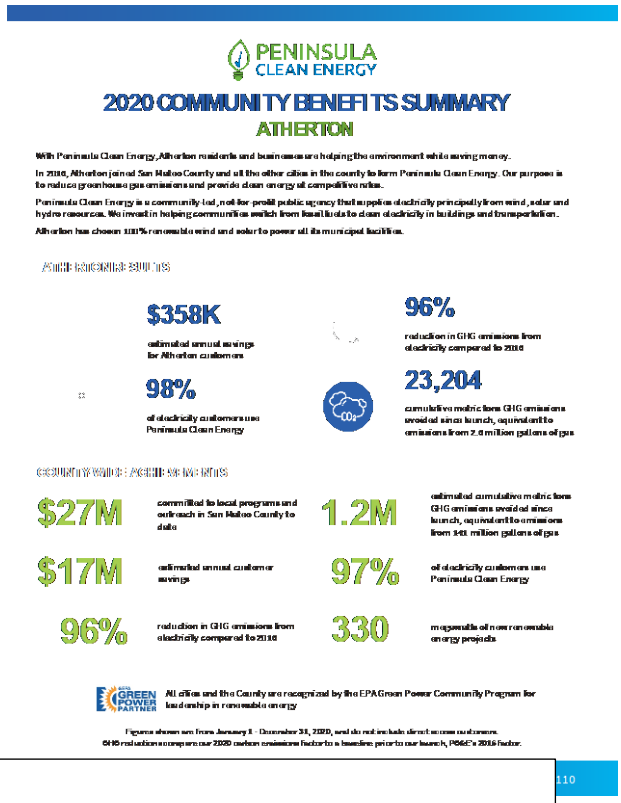
This short-term target was met in large part because of the State's continuing push for cleaner cars and fuels, as well as the significant shift of residents to Peninsula Clean Energy. Much work remains on implementing the 25 measures in the CAP.

2. Switched to Greener Energy

Since 2016, 98 percent of the Atherton community has transitioned its electricity needs to Peninsula Clean Energy (PCE), a community-controlled joint powers agency that helps source green energy to power the Peninsula. Most of these customers opted for PCE's ECO Plus service which provides nearly 100 percent of its electricity from carbon-free sources like wind, solar, and hydroelectric.[4]

This has been a major contributor to meeting the Town's short-term goals (Measure EC6), as generating, distributing, and consuming energy represents the largest source of GHGs in Atherton.

These programs saved Atherton customers $358,000 in utility bills over previous utilities, showing how going green produce a win-win outcome.


PENINSULA CLEAN ENERGY

2020 COMMUNITY BENEFITS SUMMARY

ATHERTON

With Peninsula Clean Energy, Atherton residents and businesses are helping the environment while saving money.

In 2016, Atherton joined San Mateo County and all the other cities in the county to form Peninsula Clean Energy. Our purpose is to reduce greenhouse gas emissions and provide clean energy at competitive rates.

Peninsula Clean Energy is a community-led, not-for-profit public agency that supplies electricity principally from wind, solar and hydro resources. We invest in helping communities switch from fossil fuels to clean electricity in buildings and transportation.

Atherton has chosen 100% renewable wind and solar to power all its municipal facilities.

ATHERTON'S 2020 IMPACTS

$358K
estimated annual savings for Atherton customers

96%
reduction in GHG emissions from electricity compared to 2016

98%
of electricity customers use Peninsula Clean Energy

23,204
cumulative metric tons GHG emissions avoided since launch, equivalent to emissions from 2.6 million gallons of gas

SECURITY WIDE ACHIEVEMENTS

$27M
committed to local programs and outreach in San Mateo County to date

1.2M
estimated cumulative metric tons GHG emissions avoided since launch, equivalent to emissions from 141 million gallons of gas

$17M
estimated annual customer savings

97%
of electricity customers use Peninsula Clean Energy

96%
reduction in GHG emissions from electricity compared to 2016

330
megawatts of new renewable energy projects

All cities and the County are recognized by the EPA Green Power Community Program for leadership in renewable energy

Figures shown are from January 1 - December 31, 2020, and do not include direct access customers.
GHG reductions compare our 2020 carbon emissions factor to a baseline prior to our launch, PG&E's 2016 factor.

110

What's Next?

Because residences are the largest contributor to Atherton's GHG emissions, focusing on natural gas use in homes is the next big opportunity. While "reach codes" can help ensure that natural gas use in new homes is reduced, replacing gas use in existing homes is an even bigger opportunity to reduce GHG emissions.

[4] The average mix of sources for PG&E currently includes sources such as coal (3%), nuclear (9%), natural gas (34%), hydroelectric (15%).

3. Reducing Organic Waste

As part of a Statewide effort, the Town is partnering with the County to reduce organic waste (food scraps, yard trimmings, cardboard), which makes up half of California's landfills. The process of collecting, sorting, and disposing of solid waste generates a lot of methane and other GHGs. Recent State law (SB 1383) calls for a 75 percent reduction in landfilled organic waste by 2025.

These efforts are in line with the CAP's solid waste measures, including measures that promote diversion of waste (WC1, WC3) and those that call on public events and government purchasing decisions to be greener (WM1, WM2, WM3).

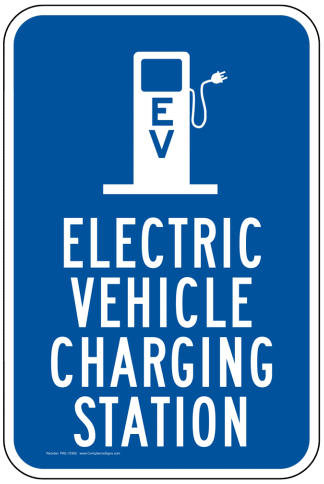
Atherton is working with its waste hauler GreenWaste Recovery to redirect compostable materials away from landfills, where they often can't break down due to a lack of oxygen, producing GHGs in the process. By diverting organic waste from landfills to composting facilities, the Town is helping relieve pressure on our landfills while reducing carbon emissions.

SB 1383 also calls for a 20 percent cut in disposal of edible food by 2025. The Town is working with schools and facilities that serve food to reduce food waste that makes its way into our landfills.

What's Next?

More public awareness campaigns about food waste at home, as an average of 3.5 pounds of food is wasted per person in the U.S.

4. Shifted Toward Electric Vehicles



From 2012 to 2018, Atherton residents increased their purchase of electric vehicles twelve-fold, from 148 in 2012 to 1,823 in 2018. Today, these zero emission cars represent over five percent of vehicles in the City. Purchases of hybrid-electric vehicles also increased by 16 percent during this period and make up eight percent of cars in the City.

In addition, the Police Department has a hybrid-electric vehicle and is considering investing in more clean air vehicles. This includes two hybrid-electric or electric vehicles for code enforcement and administration, with the potential for electric patrol cars as early as 2023, once they are pursuit-rated (e.g., stronger brakes, electrical systems that support lights, radios, computers).

This is an important start to reducing GHG from our transportation system, but Atherton's cars still emitted 19,801 metric tons of global warming gases in 2019. As auto manufacturers continue to offer more zero emission vehicle choices, the use of electric cars will continue to increase. This is important because California's Climate Change Scoping Plan aims for four million vehicles by 2030.

What's Next?

As more people shift to electric vehicles, our charging infrastructure will need to improve, especially as we rely more on green energy sources. In particular, solar power floods the energy grid with power during the day, but doesn't generate power in the evenings, when electricity demand for charging cars often peaks.

5. Phasing Out Disposable Food Service Ware

Atherton is working with the County to reduce the use of single-use, disposable food service ware at food facilities. This includes plates, utensils, spoons, cups, and even condiments used to serve and eat food. Both county and State mandates (AB 1276) are calling on restaurants, schools, and other food facilities to use items that can be composted or recycled. This is another part of the solid waste stream that will help reduce landfill demand and the transport and handling of such materials.

These efforts are in line with the CAP's solid waste measures, including measures that promote diversion of waste (WC1, WC3) and those that call on public events and government purchasing decisions to be greener (WM1, WM2, WM3).

What's Next?

While the cost of compostable and recyclable food service ware is higher than disposable products, economies of scale are likely to reduce costs to businesses and consumers over time.

Challenges Lie Ahead

Moving to a Net Zero City Will Be Challenging

As concerns about climate change grow, expectations for reducing GHG have also increased. In 2016, the CAP called for a 49 percent reduction in emissions below 2005 levels by 2030. This stems from SB 32, which calls for the State to reduce its GHG emissions 40 percent below 1990 levels by 2030. As shown in Figure 2, preliminary forecasts show that continued progress on clean air vehicles, low-carbon fuels, and cleaner energy sources can get us close to that SB 32 target. The Town will need to continue its progress on its local measures in order to reach the 2030 target.

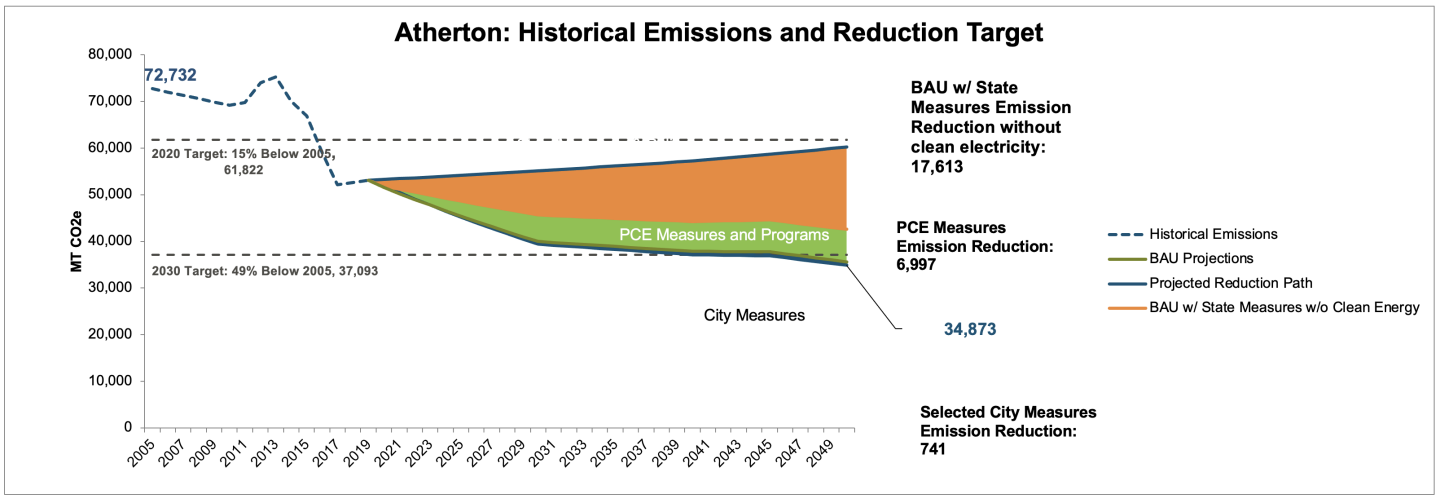


Figure 2
Potential Scenarios for Future GHG Emissions

However, the State is looking further to achieve a net zero scenario where California emits no net GHGs. A recent study for the California Air Resources Board shows it's possible to get there by

2045 and many jurisdictions are now looking to raise the bar. Moving toward carbon neutrality in the next 30 years will require the Town to make hard choices about how to green its transportation system, solid waste, water, energy, and wastewater infrastructure.

Continue to Implement CAP Measures

Of the 25 measures in the 2016 CAP, there remain some measures that need consensus and support to advance. Pursuant to the City Council's 2017 direction, the 16 priority measures will be the focus for now. The following table summarizes the status of the CAP's strategies. Staff will continue to explore the viability of these measures, particularly those that the Town has direct authority over. In addition, it will increase public education and awareness of the voluntary measures that rely on residents and institutions to make greener decisions.

While addressing climate change is a long-term effort, the need for short-term impacts is key. As such, the CAP's measures may be refined over time.

Policy Number	Policy Overview	GHG Target Reductions		Status
		2020	2030	
EC1*	Voluntary residential green building ordinance for new construction	81	74	Considering reach codes. Updated sustainability website enhances information about benefits of voluntary programs and rebates/financial incentives.
EC2*	Incorporate Energy Upgrade programs and similar rebate	291	458	Updated sustainability website enhances information about benefits of voluntary programs and rebates/financial incentives.
EC3	Implement program for residential shade trees	61	111	Updated sustainability website enhances information about benefits of voluntary programs and rebates/financial incentives.
EC4*	Voluntary commercial green building ordinance	7	19	Updated sustainability website enhances information about benefits of voluntary programs and rebates/financial incentives.
EC5	Promote PG&E commercial energy efficiency/demand response programs	129	101	Updated sustainability website enhances information about benefits of energy efficiency and demand responsive programs.
EC6*	Community Choice Aggregation	2,797	4,295	Continuing to work with PCE to increase GHG reduction benefits of CCA.
EM1	Energy efficient street lighting	6	4	Continuing to upgrade to LED lighting. PG&E controls many street lights.
EM2	Environmentally preferred purchasing policy- Energy	2	1	Environmental purchasing policy being developed.
EM3	Renewable energy installation on municipal property	29	12	Considering solar projects at Town facilities where feasible.
EM4*	Energy efficiency in municipal buildings	105	61	Incorporated energy efficiency into Town Center,
EM5	Implement municipal program for shade trees	3	2	Evaluating potential where feasible.
WTRC1*	Water conservation incentives	64	93	Updated sustainability website enhances information about benefits of voluntary programs and rebates/financial incentives.
WTRC2*	Water conservation ordinance	58	84	Updated sustainability website enhances information about benefits of voluntary programs and rebates/financial incentives.
WTRC3*	Voluntary water conservation programs	1	1	Updated sustainability website enhances information about benefits of voluntary programs and rebates/financial incentives.
TRC1*	Implement Bike Pedestrian Master Plan	233	198	Continuing to seek grants and funding to implement capital improvements.
TRC2*	Implement Safe Routes to School	119	162	Some improvements funded with federal infrastructure funding. Continuing to seek grants and funding assistance to implement capital improvements.
TRM1	Efficient fleet policy	4	7	Atherton Police Department considering electric vehicle purchases.
TRM2	Flexible schedules	31	30	Evaluating potential for flexible schedules and housing options.
TRM3	Participation in County-wide rideshare program	1	1	Working with C/CAG and Commute.org on countywide rideshare program.
WC1*	Set higher community waste diversion goal	1,253	1,253	Switched to GreenWaste in January 2021, implementing SB 1383, disposable food service ware, and other programs to increase diversion.
WC2*	Commercial recycling through mandatory ordinance	S	S	Same as WC1
WC3*	Promote recycling of yard waste	S	S	Working with GreenWaste to educate residents and institutions.
WM1*	Create Sustainable Vendor Policy for public events	S	S	Working with County to address Disposable Food Service Ware ordinance.
WM2*	Environmentally preferred purchasing policy	S	S	Policy being developed to comply with SB 1383.
WM3*	Zero waste policy in governmental operations	S	S	Zero waste program being developed.

Table 3 Status of CAP Measures

* Priority measure per City Council direction January 2017

S Supportive measure associated with Measure WC1

Next Steps

As the CAP is a living document, potential updates and refinements to the Plan will be considered based on evolving circumstances. These include:

- Working with the County Office of Sustainability to confirm the GHG emissions inventory for 2020
- Updating GHG emissions inventory forecasts through 2030 and beyond.
- Continuing to report results to the City Council and considering updates to the CAP to achieve 2030 target.
- Continuing to implement the measures from the 2016 CAP and assess whether refinements are needed to advance the local programs targeting energy, water, solid waste, land use, and transportation sources.