

Report to Town Council

Agenda Item 7

From: Jackie Young, Planning Director

January 10, 2017

Approved by: Kevin Bryant, Town Manager

SUBJECT: ANNUAL REPORTING FOR THE CLIMATE ACTION PLAN (CAP) 2016

RECOMMENDATION

It is recommended that the Town Council accept the CAP Implementation Report for 2016; and direct staff to circulate the report to the public for the required 30-day review period, between February 2017 and March 2017, via newspaper noticing and posting online.

DISCUSSION

Development of the Town of Woodside Climate Action Plan (CAP) was required as mitigation for adoption of the Town of Woodside's General Plan Mitigated Negative Declaration in 2012. The Town's CAP was adopted on September 22, 2015. The CAP sets forth a program to achieve targeted emission reductions. As part of the process of developing the Plan, the Town identified 20 local measures to be implemented during the planning period (2015-2020) to reduce GHG emissions.

The Town works with the Sustainability and Conservation Committee and other Town departments, committees, and decision makers to prioritize measures for implementation. The Climate Action Task Force and Town Liaison track the emissions, resource savings, and any other effects of each implemented measure, as well as estimated costs to government, residents and businesses. Each measure is summarized in the Climate Action Plan (CAP) Implementation (2016).

As part of this program, the CAP provides guidance in preparing yearly implementation reports to describe the Town's progress in implementing the measures described in the CAP. The Annual Climate Action Plan Implementation Report documents the Town's progress in implementing the measures identified in the Climate Action Plan, and highlights measures still requiring attention. The first annual report (for 2016) is **Attachment 1**. **Attachment D** to this report notes progress made in *bold/italic*.

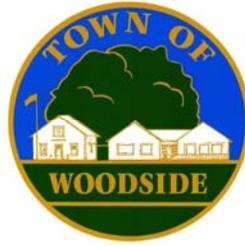
PUBLIC COMMENT

No comments have been received on the Town's CAP Implementation Report for 2016. Any comments received will be transmitted as desk items.

CONCLUSION

Acceptance of the attached Implementation Report will release the report for the required 30-day public review.

Attachment 1 Climate Action Plan Implementation Program (2016)



Town of Woodside

Climate Action Plan Implementation Program (2016)



January 2017

Acknowledgements

Town Council

Thomas H. Livermore, Mayor
Chris Shaw, Mayor Pro Tem
Deborah C. Gordon
Anne Kasten
Peter Mason
Dave Tanner
Daniel Yost

Town Manager and Staff Liaison to the Sustainability and Conservation Committee

Kevin Bryant

Sustainability and Conservation Committee

George Offen, Chair
Annie Kaskade, Vice Chair
Jason Mendelson
Robert B. Flint, Jr.
Christiana State
Sten Mawson
Emily Bouthillette
Brady Steckbauer

Town Staff

Jackie Young, AICP, Planning Director
Sage Schaan, AICP, Principal Planner
Sean Mullin, AICP, Associate Planner
Sean Rose, Public Works Director/Town Engineer
Joanne Kurz, Building Official

1. Introduction

The Town of Woodside adopted the Town of Woodside Climate Action Plan on September 22, 2015 (Resolution No. 2015-7066).

2. Purpose

The purpose of the Plan is to describe the principal sources of the Town of Woodside’s greenhouse gas (GHG) emissions, and to outline the goals and measures the Town has identified for achieving the community’s target of reducing emissions to 15% below 2005 levels by 2020 (**Attachment A**).

Preparation and adoption of the Climate Action Plan (CAP) was the sole mitigation measure (therefore a mandated action) identified in the Mitigated Negative Declaration prepared for the General Plan (2012), and has been completed as described below:

- The Sustainability Element of the 2012 General Plan highlighted the Town’s commitment to resource conservation and the reduction of greenhouse gases.

As stated by Jason Mendelson, the former Chair of the Town’s Sustainability and Conservation Committee, the CAP “...is an integral part of the Town’s commitment to environmental stewardship, and it satisfies the requirement to produce a CAP specified by the Mitigated Negative Declaration for the 2012 Town General Plan”. On an ongoing basis, the Town will work with the Sustainability and Conservation Committee to implement specified measures.

The Plan was developed using the Regionally Integrated Climate Action Planning Suite (RICAPS), funded by a grant from the Bay Area Air Quality Management District (BAAQMD) and by the California utility customers, administered by Pacific Gas and Electric (PG&E). This grant was also carried out under the auspices of the California Public Utility Commission (PUC), with matching funds provided by the City and County Association of Governments of San Mateo County (C/CAG).

3. Climate Action Task Force

The Sustainability and Conservation Committee provided tremendous expertise and effort in the development of the CAP. A subcommittee of this larger committee has been formed to serve as the Climate Action Task Force. The Climate Action Task Force is the primary entity implementing the CAP. Over the plan period, the Task Force will engage the public and encourage conservation and sustainability on the part of all of the Town’s residents. The Task Force will prepare yearly updates, engage the public on an ongoing basis, and ensure a GHG inventory is conducted every five years (the next inventory is anticipated in 2018 for the 2020 Plan Update), on a schedule that coincides with that

required by the Bay Area Air Quality Management District (BAAQMD) according to the International Council for Local Environmental Initiatives (ICLEI) community emissions protocol. The Town's Manager, Kevin Bryant, serves as the Town Liaison to this Task Force.

4. Date of Presentation/Acceptance by the Town Council

The Annual Climate Action Plan Implementation Report (ACAPIR) is prepared in January of each year, followed by a 30-day public comment period to allow community input on implementation of the Plan. **Attachment B** identifies the Schedule for Plan implementation. The Plan was presented to the Town Council on January 10, 2017, and was circulated for public review between February 2017, and March, 2017.

5. Progress in Implementation of the Climate Action Plan

The Annual Climate Action Plan Implementation Report (2016) documents the Town's progress in implementing the measures identified in the Climate Action Plan, and also highlights measures still requiring attention.

As part of the process of developing the Plan, the Town identified 20 local measures to be implemented during the planning period (2015-2020) to reduce GHG emissions. Cumulatively, implementation of these measures would result in the reduction of 2,179 MTCO₂ (1.84 percent below the Business as Usual (BAU) projected emissions). These measures, combined with the State mandated programs, are anticipated to reduce GHG within the Town by a total of 28,300 MTCO₂e, or 23.92%, thereby exceeding the 15% State Emissions Reduction Requirement.

The Town worked with the Sustainability and Conservation Committee and other Town departments, committees, and decision makers to prioritize measures for implementation. **Attachment C** identifies that prioritization of measures. Of the 20 measures, implementation of four of the measures (Measures 3.1.3, 3.1.10, 3.3.1, and 3.4.1) would achieve 81 percent of the local Town reductions in GHG identified. These measures are referred to as 'High Priority Measures'. The Climate Action Task Force and Town Liaison track the emissions, resource savings, and any other effects of each implemented measure, as well as estimated costs to government, residents and businesses. Each measure is summarized in the Climate Action Plan (CAP) Implementation (2016). **Attachment D** provides a progress report on the Town implementation of measures, with progress made noted in *bold/italic*.

CAP IMPLEMENTATION REPORT – 2016

Attachments

- A. Town of Woodside Emission Targets**
- B. Schedule for Implementation Report Updates**
- C. Prioritization of Measures**
- D. Climate Action Plan (CAP) Implementation (2016)**

Attachment A: Meeting the Emission Targets

The Town would meet the emission reduction target of 15% through the Total Statewide Initiative Emissions Reductions (22.07% reductions from the 2020 anticipated business as usual emission levels); implementation of the Town's local measures would result in additional reductions of 1.84%, for total estimated reductions of nearly 24% (23.92%) from 2020 business as usual emission levels, as shown in the Table below.

Meeting the Town's 2020 Target (CAP Table 9)

Estimated 2020 Business-as-usual Town Emissions: <u>118,298 MTCO_{2e}</u>	
Reduction Measure	Expected Reduction in Town's 2020 Business-as-usual Emissions in MTCO_{2e} (Percent of Total Emissions)
State Initiative – Transportation Sector: Assembly Bill AB1493 (Pavley) (does not apply to off-road vehicles)	17,880 (15.11%)
State Initiative – Transportation Sector: Low Carbon Fuel Standard Program (applies to both on-road and off-road vehicles) ¹	6,535 (5.52%)
State Initiative – Energy Sector: 33 percent Renewable Portfolio Standard (33% RPS)	1,706 (1.44%)
Town Climate Action Plan: Reduction Measures	2,179 (1.84%)
Total Emissions Reductions:	28,300 (23.92%)
Exceeds 15% State Emissions Reductions Requirement by:	10,555 (8.92%)

¹ Telephone Communication with DNV GL Consulting Firm, June 9, 2015.

Attachment B: Timeline

The timeline shown below, lists the major milestones in the Climate Action Plan (CAP) implementation process. Progress and updates to this schedule should be submitted to the Town Council and the public as part of an annual Plan Implementation Report.

Climate Action Plan Implementation (CAP Table 10)

Milestone	Target Date
GHG Inventory Completed	11/2009
GHG Reduction Target Established	01/2012
Draft CAP Completed	06/30/2015
Draft CAP Published	07/20/2015
Sustainability Committee Review	09/2015
Council Review/CAP Adoption	9/2015
Climate Action Task Force and Sustainability and Conservation Committee Begin Implementation	01/2016
1 st Annual CAP Implementation Report	01/2017
Community Comment Period	02/2017 - 03/2017
2 nd GHG Inventory Completed	01/2018
1 st CAP Update	01/2020

Attachment C: Summary of Measures

Summary of Measures (CAP Table 8)						
Measure	Description	Electricity Reduction (kWh/year)	Natural Gas Reduction (therms/year)	Emission Reductions (MTCO ₂ e)	Additional Environmental Impacts	Priority
ENERGY						
3.1.1	Commercial Green Building Ordinance	1,216	64	1		MEDIUM
3.1.2	Residential Green Building Ordinance	2,031	2,689	15		MEDIUM/HIGH
3.1.3	Incentivize Solar Energy Installation and Other Renewable Energy	3,615,326	44,092	704	Some visual resource impacts from adjacent or nearby properties	HIGH
3.1.4	Participate in Energy Upgrade Programs	93,882	8,315	56		MEDIUM/HIGH
3.1.5	Promote PG&E Commercial and Industrial Energy Efficiency/Demand Response Programs	27,260	520	6		MEDIUM
3.1.6	Shade Trees; and Preservation of Significant Trees and Forest Land	148,991	8,018	62		MEDIUM/HIGH
3.1.7	Energy Efficient Street Lighting	6,132	0	1		LOW
3.1.8	Renewable Energy Installation on Municipal Property	24,966	0	3		MEDIUM/HIGH
3.1.9	Energy Efficiency in Municipal Buildings	14,400	275	3		MEDIUM/HIGH
3.1.10	Voluntary Real Estate Conservation Disclosure	197,402	16,250	112		HIGH
3.1.11	Electric Vehicle (EV) Chargers	N/A	N/A	458		MEDIUM

Summary of Measures (CAP Table 8)						
Measure	Description	Electricity Reduction (kWh/year)	Natural Gas Reduction (therms/year)	Emission Reductions (MTCO₂e)	Additional Environmental Impacts	Priority
TRANSPORTATION AND LAND USE						
3.2.1	Walkable/bikable Street Landscape	0	0	47	93,500 VMT/year reduction & 3,740 gallons of gasoline per year reduction	MEDIUM/HIGH
3.2.2	Low Emission Government Vehicles	0	0	21	2,374 gallons of gasoline per year reduction	MEDIUM
3.2.3	Local Food	0	0	891	182,208 VMT/year reduction	LOW
SOLID WASTE						
3.3.1	Set Higher Waste Diversion Rate Goal	0	0	551	3,166 tons of waste per year reduction	HIGH
3.3.2	Environmentally Preferred Purchasing Policy - Waste Reduction	0	0	0	Beneficial impacts to air quality and water	MEDIUM/HIGH
3.3.3	Reduce Waste at Point-of-Purchase	0	0	0	Beneficial impacts to air quality and water	MEDIUM
WATER						
3.4.1	Water Conservation Incentives	15,824	7,908	44		HIGH
ALL SECTORS						
3.5.1	Green Business Program	18,401	351	4		MEDIUM
3.5.2	Future Programs					
TOTAL:		4,165,831	88,482	2,179		

Attachment D: Climate Action Plan (CAP) Implementation (2016)

3.1 Energy

Measures:	Comments:
<p>3.1.1 Goal: Commercial Green Building Requirements Continue to adopt all new State Commercial Building Codes. Explore higher energy performance requirements for new commercial buildings, and incentives for higher energy performance for tenant improvements.</p>	<p>The Town adopts and implements Title 24 of the California Code of Regulations (CCR), which incorporates green building requirements. As of January 1, 2017, all projects are required to comply with the 2016 California Code of Regulations. The Code includes Building, Residential, Electrical, Plumbing, Mechanical, Energy, Green Standards, and Reference Standards Codes. (http://www.bsc.ca.gov/Home/Current2013Codes.aspx).</p>
<p>3.1.2 Goal: Residential Green Building Ordinance Continue to adopt all new State Residential Building Codes. Encourage and incentivize achievement of CALGreen Tier 1 energy performance. Continue to encourage the integration of sustainable design features and elements, such as passive heating and cooling, solar, green roofs, geothermal as described in the Building Design section of the Residential Design Guidelines and the General Plan Sustainability Element. Seek to harmonize with regional Green Building Ordinances. Revise the WMC to require that any new residence seeking a Maximum Residence Size Exception achieve CALGreen Tier 1 energy performance.</p>	<p>The Town adopts and implements Title 24 of the California Code of Regulations (CCR), which incorporates green building requirements. As of January 1, 2017, all projects are required to comply with the 2016 California Code of Regulations. The Code includes Building, Residential, Electrical, Plumbing, Mechanical, Energy, Green Standards, and Reference Standards Codes. (http://www.bsc.ca.gov/Home/Current2013Codes.aspx).</p>

Measures:	Comments:
<p>3.1.3 ** Goal: Create Incenties for Installing Solar Energy (Solar Arrays/Photo Voltaic Panels) and Other Renewable Systems Provide financial incentives for installing solar energy (solar arrays/photo voltaic panels), hot water systems, geothermal, and other types of installations. Provide free assistance for project developers through power purchase agreements and interconnection processes. Encourage bulk purchases such as the Portola Valley Bulk purchase.</p>	<p>The Town subsidizes permitting costs for solar arrays. The Town also expedites plan check of solar permits. Information on the Town's process for reviewing solar arrays is included on the Town's website (http://www.woodsidetown.org/building/expedited-solar-photovoltaic-one-and-two-family-dwellings-10kw-or-less-roof-mounted). As of January 1, 2017, all projects are required to comply with the 2016 California Code of Regulations. Adopting the most up-to-date codes, ensures property owners will install energy efficient systems and renewable technologies for their homes. The Town's Building Official indicates that communities that have adopted their own building standards have increased costs substantially for the home owners in their communities that are building or upgrading structures. <i>Between January 1, 2016 and December 31, 2016, the Town 'finalaed' 42 permits for (primarily) rooftop solar arrays.</i></p>
<p>3.1.4 Goal: Participate in Energy Upgrade Programs Town to provide or encourage residential energy audits and retrofits. Leverage existing rebates/add additional rebates for energy efficient retrofits.</p>	<p>The Town provides information to applicants and the public on available programs such as 'Energy Upgrade California' at Town Hall.</p>
<p>3.1.5 Goal: Promote PG&E Commercial and Industrial Energy Efficiency/Demand Response Programs Town to promote and assist with marketing and outreach for PG&E energy efficiency and demand response programs for the nonresidential sector. Leverage existing rebates/add additional rebates for energy efficient retrofits.</p>	<p>The Town provides information to applicants and the public on available programs such as 'Energy Upgrade California' at Town Hall.</p>

Measures:	Comments:
<p>3.1.6 Goal: Plant Shade Trees, and Continue to Preserve Significant Trees and Forest Lands Continue to promote shade trees during planning entitlement as described in the Building Design section of the Residential Design Guidelines, Sustainability section, and continue to protect Woodside's significant trees and forest lands.</p>	<p>Ongoing implementation of RDG recommendations for planting native trees.</p>
<p>3.1.7 Goal: Energy Efficient Street Lighting Replace street, signal lights, parks and parking lot lighting with efficient lighting (LEDs, induction, etc).</p>	<p><i>The Town received a loan from PG&E to install LEDs at both Town Hall and Barkley Fields. The Town is already saving 206Kwh per month at Town Hall, and 167 Kwh per month at Barkley Fields. The Town is using 50% less electricity at these locations.</i></p>
<p>3.1.8 Goal: Renewable Energy Installation on Municipal Property Complete a feasibility study on the installation of solar or other renewable energy projects at select Town facilities and install where feasible. The Town should complete these studies within 2 years of adopting the Climate Action Plan.</p>	<p>The Town is currently exploring the feasibility of installing photo-voltaic (PV) panels on the roof at Town Hall.</p>

Measures:	Comments:
<p>3.1.9 Goal: Energy Efficiency in Municipal Buildings Audit Town facilities for energy efficiency opportunities and implement energy efficient retrofits. The Town participates in San Mateo County Energy Watch and leveraged benchmarking to identify opportunities for energy efficient upgrades and track energy performance. Leverage other programs that provide funding.</p>	<p>Since 2005, the Town has installed new HVAC systems in Town Hall and Independence Hall. <i>In 2016, the Town joined Peninsula Clean Energy and opted in for the 100% renewable energy product for all of its municipal accounts. Also in 2016, the Town replaced the existing metal halide light fixtures in Town Hall with LED fixtures. The Town also installed more efficient water faucets, low flow toilets with automatic flushes, and LED fixtures within the restrooms at Town Hall and Independence Hall. The Town will explore conducting energy audits periodically.</i></p>
<p>3.1.10** Goal: Voluntary Real Estate Conservation Disclosure Voluntary disclosure of energy use information at time of home sale.</p>	<p>No action has been taken on this measure.</p>
<p>3.1.11 Goal: Electric Vehicle (EV) Chargers Encourage the installation of electric vehicle chargers and use of electric vehicles to reduce GHG emissions. Comply with the State Building Code by supplying adequate electric service in new residential garage construction to serve electric vehicles.</p>	<p>The Town complies with the State Building Code requirement that new residential garage construction be supplied with adequate electric service for charging electric vehicles. According to the Town Building Official, most residents are installing 1-2 charging stations as part of new garage construction. <i>Between January 1, 2016, and December 31, 2016, Town residents installed 14 electric vehicle chargers.</i></p>

3.2 Transportation and Land Use

Measures:	Comments:
<p>3.2.1 Goal: Walkable/bikeable Street Landscape Continue to promote complete streets concepts (walking, biking, equestrian trails, hitching posts, bike lanes, bike parking, traffic calming, beautification, etc.) appropriate for the Town's rural setting, and recognizing the physical constraints of existing rights-of-way and easements including winding roads, adequate sight distance, and steep terrain.</p>	<p>The Circulation Committee's primary focus is on maintaining the existing public circulation network of for all user groups, including pedestrians, and addressing issues related to public safety on this network. The Committee also works to prioritize improvements and new pathways and trails throughout this network. In 2013, the Town revisited the Town Center Plan with a resident task force. The single action item that came out of this exercise was improving circulation around the Town Center, particularly the Safe Routes to School. The Town hired Parisi & Associates to prepare a Safe Routes to School Audit. The Town prioritized parts of a route, such as the improvements to the Woodside Pathway along Woodside Elementary School, based on the Safe Routes to School Audit. The Town's Capital Improvement Program includes funding over its five year period for Safe Routes to School projects. <i>During 2016, the Town restriped Whiskey Hill Road which improved bike lanes.</i></p>
<p>3.2.2 Goal: Low Emission Government Vehicles Target purchase of new or conversion of existing government vehicles to more efficient vehicles.</p>	<p>Since 2005, the Town has purchased hybrid vehicles, and continues this practice.</p>
<p>3.2.3 Goal: Local Food Encourage the growth and consumption of local food by promoting local farmers' markets, food swaps, and community gardens.</p>	<p>The closest Farmers' Market to Woodside is held every Thursday at Portola Valley Town Hall (summer: 2-6 p.m.; winter 2-5 p.m.). Farmers' markets at the Woodside Elementary School and 17285 Skyline Blvd. are not operating at this time.</p>

3.3 Solid Waste

Measures:	Comments:
<p>3.3.1** Goal: Set Higher Waste Diversion Rate Goal Increase participation in recycling programs and ensure weekly collection of recyclables and organic waste. Explore group collection of animal waste. Explore setting a higher diversion rate goal and encouraging waste reduction.</p>	<p>As indicated in WMC Section 50.30 (G), the Town finds that except in unusual circumstances, it is feasible to divert an average of at least 60% of all construction and demolition debris from construction, demolition, and renovation covered projects. The Town participates in the annual chipper program with the Woodside Fire Protection District. The primary goal of the program is to reduce fire fuel. Additionally, brush is chipped back onto the site where it was generated, thereby reducing waste, and adding to mulch in the soil.</p>
<p>3.3.2 Goal: Environmentally Preferred Purchasing Policy - Waste Reduction Implement a Town sustainable purchasing policy that emphasizes recycled materials. Prepare a purchasing policy that defines cost not to exceed a certain additional percentage.</p>	<p><i>The Town Council adopted Resolution 2016-7132, which established an Environmentally Preferred Purchasing Policy for the Town..</i></p>
<p>3.3.3 Goal: Reduce Waste at Point-of-Purchase Encourage ways to reduce waste at point-of-purchase.</p>	<p><i>The Town limits the number of plan sets required for early submittals to avoid paper waste. Streamlining the planning process and creating the ASRA process have worked to reduce both the number of meetings and the number of agenda packets required. The printer paper used at Town Hall is certified as being part of a Sustainable Forestry Initiative.</i></p>

3.4 Water

Measures:	Comments:
<p>3.4.1** Goal: Water Conservation Incentives and Requirements Promote existing and/or new rebates for water efficient appliances and fixtures. Continue to promote drought tolerant and native landscaping, efficient irrigation systems, and gray water/ rain water collection systems; during planning entitlement as described in the Woodside Residential Design Guidelines, Landscape Elements, Sustainability section. Implement Resolution No. 2015-7048, the Town's endorsement of the California Water Service Company's regulations, and continue to implement the State WELO program.</p>	<p>On February 23, 2016, the Town formally adopted the State's 2015 Model Water Efficient Landscape Ordinance (WELO). The Ordinance requires that applicants proposing new residential landscape projects over 500 square feet, and all retrofit residential landscape projects over 2,500 square feet, plant water efficient landscaping, limit turf to 25%, monitor water usage based on an established water budget, and install efficient irrigation systems that meet national standards. Additional provisions apply to residential landscapes over 5,000 square feet, and commercial landscapes over 1,000 feet. Additionally, the Town Council added the requirement to cover new pools and spas.</p> <p>The Town's Residential Design Guidelines (RDG) encourage sustainable landscape design, incorporating graywater and rainwater collection, and gravity drip irrigation. The Town is working with Cal Water to achieve required reductions in water use and publicizes drought restrictions on the Town's website.</p> <p><i>Between January 1, 2016, and December 31, 2016, the Town 'finalized' one permit for a grey water system. The Town also approves many rain water collection systems and cisterns as part of the development of residential properties. In 2017, Town staff should track rain water collection systems and cisterns.</i></p>

3.5 All Sectors

Measures:	Comments:
<p>3.5.1 Goal: Green Business Program Establish a voluntary program that allows businesses to brand themselves as green by following sustainable practices.</p>	<p>No action has been taken on this measure.</p>