



City of Palo Alto

(ID # 11110)

Utilities Advisory Commission Staff Report

Report Type:

Meeting Date: 3/5/2020

Summary Title: 2020 Sustainability and Climate Action Plan Update

Title: 2020 Sustainability and Climate Action Plan (S/CAP) Update

From: City Manager

Lead Department: Utilities

Executive Summary

Staff is developing a 2020 Sustainability and Climate Action Plan (S/CAP) Update to help the City meet its goal of reducing Greenhouse Gas (GHGs) emissions 80 percent below 1990 levels by 2030 and other important Sustainability Goals. The purpose of this Informational Report is to give a status report on the development of the S/CAP Update and outline the tasks and schedule for completing it. A critical component of the schedule is the engagement of Council, the Utilities Advisory commission, and the Community, and therefore this Informational Report will focus on the engagement steps needed to obtain input for the S/CAP Update.

This is a re-transmittal of a report that was provided to the City Council on February 10, 2020

Attachments:

- Attachment A: 2020 Sustainability and Climate Action Plan Update



City of Palo Alto

City Council Staff Report

(ID # 10941)

Report Type: Informational Report **Meeting Date:** 2/10/2020

Council Priority: Climate/Sustainability and Climate Action Plan,
Transportation and Traffic

Summary Title: 2020 S/CAP Update

Title: 2020 Sustainability and Climate Action Plan Update

From: City Manager

Lead Department: Public Works

Recommendation

This is an Informational Report and requires no Council Action.

Executive Summary

Staff is developing a 2020 Sustainability and Climate Action Plan (S/CAP) Update to help the City meet its goal of reducing Greenhouse Gas (GHGs) emissions 80 percent below 1990 levels by 2030 and other important Sustainability Goals. The purpose of this Informational Report is to give a status report on the development of the S/CAP Update and outline the tasks and schedule for completing it. A critical component of the schedule is the engagement of Council and the Community, and therefore this Informational Report will focus on the engagement steps needed to obtain input for the S/CAP Update.

Background

The City of Palo Alto has long been a leader in sustainability, making impressive progress towards reducing its carbon impacts, greenhouse gas emissions, and resource consumption since adopting a [Sustainability Policy](https://www.cityofpaloalto.org/civicax/filebank/documents/7856)¹ in 2001, reflecting the City's intention to be a sustainable community - one which meets its current needs without compromising the ability of future generations to meet their own needs. Since then, the City has undertaken a wide range of initiatives to improve the sustainability performance of both government operations and the community at large, including: adopting one of the first municipal [Climate Action Plans](https://www.cityofpaloalto.org/civicax/filebank/documents/9946)² in the US in 2007; adopting a [Sustainability and Climate Action Plan \(S/CAP\) Framework](https://www.cityofpaloalto.org/civicax/filebank/documents/60858)³ in 2016, which includes an aspirational goal of [reducing Greenhouse Gas \(GHGs\) emissions 80 percent](https://www.cityofpaloalto.org/civicax/filebank/documents/60858)

¹ <https://www.cityofpaloalto.org/civicax/filebank/documents/7856>

² <https://www.cityofpaloalto.org/civicax/filebank/documents/9946>

³ <https://www.cityofpaloalto.org/civicax/filebank/documents/60858>

[below 1990 levels by 2030](#)⁴; providing 100 percent carbon neutral natural gas since July 2017 — making the City of Palo Alto Utilities the first utility in the world to provide carbon neutral electricity and natural gas as a standard to all customers — having provided 100 percent [carbon neutral](#) electricity since 2013; and, in December 2017 accepting the [2018-2020 Sustainability Implementation Plan \(SIP\) “Key Actions” as a summary of the City’s work program](#)⁵. Sustainability is also embedded in the [2030 Comprehensive Plan](#)⁶ (adopted in 2017), with 10 goals and over 50 actions outlined in the 2030 Comprehensive Plan Implementation Plan that are explicitly or implicitly related to sustainability.

While GHG emissions reduction is not the only goal of the S/CAP, it is the major one. To achieve an 80 percent reduction target by 2030, Palo Alto will need to meet a target “GHG reduction budget” of about 224,600 MT CO₂e⁷. The analyses in the 2016 S/CAP Framework (conducted in 2014-2015) projected that more than half of the needed additional reductions (117,900 MT CO₂e) could come from transportation related measures, just under half (97,200 MT CO₂e) from efficiency and fuel switching measures (largely in buildings), and about four percent (9,500 MT CO₂e) from continuation and extension of Palo Alto’s zero waste initiatives. These reduction targets are now outdated and do not include recent sustainability initiatives, actions, and projects. The analyses will be revised to include current information and staff will provide Council an update when new reduction targets are established.

As a result of various City-led initiatives, programs, and activities focused on climate change and sustainability, by the end of 2018 Palo Alto had reduced GHG emissions an estimated 56.5 percent from the 1990 baseline, despite a population increase of 20.4 percent from the 1990 baseline. Overall, the performance of City Municipal Operations showed a 65.8 percent reduction in Scope 1 and Scope 2 emissions⁸ from the 2005 baseline year.

Discussion

For the City to continue progress towards its climate and sustainability goals and targets, a 2020 S/CAP Update is necessary to further study the highest impact actions to take. The 2016 S/CAP Framework provided direction and overall goals through 2020. The intent was for staff to update the S/CAP every five years and develop more granular five-year work plans and short-term programs, rather than attempt to build a detailed 14-year work plan.

The 2016 S/CAP Framework was supplemented by a 2018 – 2020 SIP, which provided an implementation plan for the City’s sustainability work. While the 2018 – 2020 SIP focused on two key concerns—CO₂ emissions and Water—and four key areas of activity: Energy, Mobility,

⁴ <https://www.cityofpaloalto.org/news/displaynews.asp?NewsID=3534&TargetID=268>

⁵ <https://www.cityofpaloalto.org/civicax/filebank/documents/63141>

⁶ <https://www.cityofpaloalto.org/civicax/filebank/documents/62915>

⁷ MT CO₂e = metric tons of CO₂ equivalent

⁸ Scope 1 and Scope 2 emissions are non-biogenic emissions that are caused by human activity. Biogenic emissions are assumed to be net carbon neutral and not reported under GHG emission reporting protocols. Scope 2 emissions from electricity were eliminated starting in 2013 by the purchase of Renewable Energy Credits (RECs) under the Carbon Neutral Plan.

Electric Vehicles, and Water, staff proposes that the 2020 S/CAP Update include the following areas: Energy, Mobility, Electric Vehicles, Water, Climate Adaptation and Sea Level Rise, Natural Environment, and Zero Waste. For each area, staff – with input from the community – will include S.M.A.R.T (Specific, Measurable, Attainable, Realistic, Timely) goals and Key Actions. These goals and Key Actions will be the foundation for the 2020 S/CAP Update. A summary of the proposed areas and priorities can be found in Attachment A.

Once the Goals and Key Actions have been finalized, a consultant will perform an impact analysis, which will detail the costs, expected GHG remissions reductions, and sustainability benefits. In addition, in March 2019 Council approved a Sea Level Rise Adaptation Policy to provide a roadmap for creating a comprehensive Sea Level Rise Adaptation Plan, which will be incorporated into the 2020 S/CAP Update. After the 2020 S/CAP Update has been drafted, a consultant will prepare appropriate CEQA environmental documents, so that there is a companion CEQA review of the S/CAP Update.

Resource Impact

This Informational Report has no Financial Impact. Actions having a financial impact will be brought to Council separately.

Policy Implications

The 2020 S/CAP Update aligns with the 2019 Climate/Sustainability and Climate Action Plan Council Priority and the 2019 Transportation Council Priority.

Stakeholder Engagement

Staff has developed an Engagement Plan which identifies relevant stakeholders, proposed materials, and desired meeting milestones and outcomes. Staff will involve the community in the development of the 2020 S/CAP goals and Key Actions through a community workshop this spring and a 2020 S/CAP Summit in the fall. Some of the areas will require more in-depth discussion, and staff will hold area-specific meetings to do a deeper dive on specific topics, such as Sea Level Rise.

Staff will also provide opportunities for on-line engagement to gain a better understanding of the community's concerns and vision around the 2020 S/CAP Process, as well as provide an opportunity for community members who can't attend the meetings to weigh in. An overview of the proposed community engagement plan can be found in Attachment B. Attachment C provides an overview of the proposed 2020 S/CAP Update process.

Environmental Review

Discussion of the 2020 S/CAP Update from Council does not meet the definition of a "project" under the California Environmental Quality Act and therefore no environmental review is required.

Attachments:

- Attachment A - 2020 SCAP Update Proposed Areas and Priorities

- Attachment B - 2020 SCAP Update Community Engagement Plan
- Attachment C - 2020 SCAP Update Proposed Process

2020 SUSTAINABILITY AND CLIMATE ACTION PLAN

PROPOSED AREAS AND PRIORITIES



- Building efficiency and electrification are key to achieving Palo Alto's greenhouse gas reduction goals. Overcoming building electrification barriers at both the local and regional level will be necessary to increase market adoption in existing buildings.
- Priority: Reduce greenhouse gas emissions from Palo Alto's building sector



- Road transportation represents the largest percentage of Palo Alto's existing carbon footprint – and a congestion headache. Reducing Vehicle Miles Traveled (VMT), is one solution to reduce transportation related GHG emissions.
- Priorities: Increase active transportation (human-powered methods of travel, such as walking or bicycling); Increase availability of transit and shared mobility services



- Powering transportation through Electric Vehicles (EVs) as opposed to fossil fuel powered vehicles can significantly reduce GHG emissions and climate pollution.
- Priorities: Increase the number of EVs registered in Palo Alto; Ensure adequate EV charging infrastructure



- Water is a limited resource, and its availability will be further impacted by climate change. Strategies include reducing water consumption while exploring ways to capture and store water and increasing the availability and use of recycled water.
- Priorities: Reduce per capita water use; Increase the percentage of recycled water used; Reduce total dissolved solids (inorganic salts and some small amounts of organic matter that are dissolved in water); Manage stormwater



- Sea level rise (SLR) in San Francisco Bay is anticipated to range between 3 – 10 feet by 2100. In Palo Alto, many City services and infrastructure that are essential to the City's public health, safety, and economy are located within areas that are predicted to be inundated by Bay water if adaptation measures are not implemented.
- Priorities: Conduct a SLR vulnerability assessment; Develop and implement a SLR Adaptation Plan using protect, adapt, retreat strategies; Potentially modify City planning, zoning, building codes, and floodplain management; Protect and enhance the Baylands ecosystem



- Sustainability is not only about mitigation, adaptation, and resilience, but also regeneration –identifying opportunities for renewal, restoration, and growth of our natural environment. Palo Alto will continue to build and restore the natural environment and its ecosystem services and the bio-capacity that supports it.
- Priorities: Renew, restore, and enhance resilience of our natural environment; Maximize biodiversity; Reduce environmental impacts of our actions; Increase tree canopy; Expand the designation of pesticide-free parks and city facilities



- Reducing waste is an important strategy for both GHG reductions and overall sustainability. Zero Waste is a holistic approach to managing materials in a closed loop system (circular economy), where all discarded materials are designed to become resources for others to use.
- Priorities: Divert waste from landfills; Implement 2018 Zero Waste Plan Initiatives

2020 Sustainability & Climate Action Plan (S/CAP) Community Engagement

Seven Proposed Areas of the 2020 S/CAP Update



Area-Specific Community Input

2020 S/CAP Community Input:
Community Engagement Workshop
City Council Study Session
S/CAP Update Summit

2020
S/CAP
Update

Outreach:
Adopted 2020 S/CAP

2020 S/CAP Update Proposed Process

	2020				2021	
	Q1	Q2	Q3	Q4	Q1	Q2
Consultant and Staff Work		2019 Greenhouse Gas Inventory	Impact Analysis of Goals and Key Actions	Draft 2020 S/CAP	Finalize 2020 S/CAP	Final CEQA Report
		Draft Goals and Key Actions with Community input				
Community Engagement		2020 S/CAP Update Workshop		2020 S/CAP Update Summit		
		On-going On-Line Community Engagement				
		2020 S/CAP Update Area-Specific Community Engagement				
Council Meetings	Council Info Report			Council Study Session		Council Adopts 2020 S/CAP
						Adopted 2020 S/CAP Update