



City of Palo Alto

City Council Staff Report

(ID # 11631)

Report Type: Study Session

Meeting Date: 2/22/2021

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

Summary Title: 2021 S/CAP Strategies

Title: Status Report on 2021 Sustainability and Climate Action Plan (S/CAP) Development and Engagement

From: City Manager

Lead Department: Public Works

Recommendation

This report is intended to support discussion and no action is requested.

Executive Summary

Consistent with Council's adoption of "Climate Change – Protection and Adaptation" as one of the four priorities for CY 2021, Staff is developing a 2021 Sustainability and Climate Action Plan (S/CAP) to help the City meet its sustainability goals, including its goal of reducing greenhouse gas (GHG) emissions 80 percent below 1990 levels by 2030 (the "80 x 30" goal). Council last discussed the [Major Goals and Key Actions related to greenhouse gas emissions reduction](#)¹ on June 16, 2020. Amidst the backdrop of a global pandemic, an economic downturn, and other challenging events, Council directed Staff to continue with its work on finding strategies to achieve the 80 x 30 goal. Staff has devoted extensive analytical and research efforts to estimating the GHG reduction potential of proposed strategies, estimated costs, and additional sustainability co-benefits (such as improved local air quality or reduced cost of living). The status of the 2021 S/CAP was detailed at the [February 3, 2021 Utilities Advisory Commission Meeting](#)².

The full analysis will soon be completed. Before that is ready to be presented to Council, Staff will report on the status and seek Council feedback on the 2021 Sustainability and Climate Action Plan (S/CAP). This study session will provide the Council and the public an opportunity to review the current direction of the S/CAP work effort and key next steps.

¹ <https://www.cityofpaloalto.org/civicax/filebank/blobdload.aspx?t=59513.75&BlobID=77028>

² <https://www.cityofpaloalto.org/civicax/filebank/documents/80035>

Background

In April 2016, City Council adopted the ambitious goal of [reducing GHG emissions to 80 percent below 1990 levels by 2030](#)³ (the “80 x 30” goal) - 20 years ahead of the State of California 80 x 50 target. In November 2016 the Council adopted the [S/CAP Framework](#)⁴, which has served as the road map for achieving Palo Alto’s sustainability goals. In December 2017, Council accepted the [2018-2020 Sustainability Implementation Plan “Key Actions” as a summary of the City’s work program](#)⁵.

In early 2020, the City launched an S/CAP update to determine the goals and key actions needed to meet its sustainability goals, including the 80 x 30 goal. Staff drafted Potential Goals and Key Actions in seven areas - Energy, Mobility, Electric Vehicles, Water, Climate Adaptation and Sea Level Rise, Natural Environment, and Zero Waste - as a starting point for discussion. Since then, the City has solicited feedback from the community through a virtual on-demand S/CAP Community Engagement Workshop (March 31 – April 14, 2020), the [City of Palo Alto Sustainability website](#)⁶, and at the [April 13, 2020 City Council Meeting](#)⁷. Staff reviewed all feedback received between January 22, 2020 and April 30, 2020 and incorporated it into updated Proposed Goals and Key Actions that were presented to Council at the [June 16, 2020 Council Meeting](#)⁸. Also in June 2020, the Proposed Goals and Key Actions were discussed by the [Utility Advisory Commission](#)⁹, the [Planning and Transportation Commission](#)¹⁰, and the [Parks and Recreation Commission](#)¹¹. From September to December 2020, Staff hosted a [fall S/CAP Webinar Series](#)¹² to provide information and engage the community on various topics of the 2021 S/CAP. At the [February 3, 2021 Utilities Advisory Commission Meeting](#)¹³, Staff provided an update on the current direction of the 2021 S/CAP work effort and the detailed and actionable results staff intends to deliver.

Discussion

For the City to continue progress towards its climate and sustainability goals and targets, an update of the S/CAP 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 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.

³ <https://www.cityofpaloalto.org/news/displaynews.asp?NewsID=3534&TargetID=268>

⁴ <https://www.cityofpaloalto.org/civicax/filebank/documents/60858>

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

⁶ <http://cityofpaloalto.org/climateaction>

⁷ <https://www.cityofpaloalto.org/civicax/filebank/blobdload.aspx?t=53475.02&BlobID=76048>

⁸ <https://www.cityofpaloalto.org/civicax/filebank/blobdload.aspx?t=59513.75&BlobID=77028>

⁹ <http://cityofpaloalto.org/civicax/filebank/documents/77112>

¹⁰ <https://www.cityofpaloalto.org/civicax/filebank/documents/77435>

¹¹ <https://www.cityofpaloalto.org/civicax/filebank/documents/77463>

¹² https://www.cityofpaloalto.org/services/sustainability/sustainability_and_climate_action_plan/community_engagement/default.asp

¹³ <https://www.cityofpaloalto.org/civicax/filebank/documents/80035>

Although these are unprecedented times, with a global pandemic, an economic downturn, and other challenging events, Council directed Staff to continue with its work on developing strategies to achieve the ambitious 80 x 30 goal. Staff reviewed the goals and actions in the 2016 S/CAP Framework, the 2018-2020 Sustainability Implementation Plan, the 2018 Zero Waste Plan, the 2030 Comprehensive Plan, the Urban Sustainability Directors Network Greenhouse Gas Reduction High Impact Practices, and the Carbon Neutral Cities Alliance Game Changers list to draft potential strategies, which were then refined based on community, Council, and Commission feedback. Staff reviewed the Climate Action Plans of several other Cities, but none of the strategies reviewed have the specificity, detail, or scope needed to meet the 80 x 30 goal. Staff has devoted extensive analytical and research efforts to estimating the GHG reduction potential of proposed strategies, estimated costs, and additional sustainability co-benefits (such as improved local air quality or reduced cost of living). Staff, with technical assistance from the City's consultant, AECOM, has taken on this extensive analysis because the standard tool that most cities use – the ICLEI ClearPath tool – does not allow for the inclusion of the unique characteristics of Palo Alto (land use patterns, Electric Vehicle penetration, etc.) and does not have GHG calculators for the detailed strategies proposed.

As the analysis is progressing, a clear story is developing. First, it's clear that rapid action is needed to hold global warming to 1.5°C (3.7°F), the average global temperature at which the world begins to experience significant impacts from climate change. The world has already experienced 1°C (2.5°F) of warming. To inform policy decisions, work is under way to identify how Palo Alto's goals align with global carbon reduction needs to achieve these global warming goals. It is also clear that achieving the emissions reductions needed will be challenging both logistically and financially. Still, early analysis is revealing that the scale of expenditure is such that the community may be able to achieve the city's goals through ambitious actions if there is sufficient consensus to support significant community-wide investment. More work is needed to produce cost estimates that are ready for public presentation, but the scale of spending, if financed over decades, appears likely to be similar to current annual community expenditures on energy. Staff is working to describe how such costs might be financed and distributed in a way potentially acceptable to the community and will be looking to Council for direction on these issues. Staff is also examining impacts to groups with less ability to reduce emissions due to logistical or financial limitations, such as renters, multi-family building owners, small businesses, and lower-income residents, to propose strategies that take these community members' needs into consideration.

In general, this has led to identification of a series of high-level principles to guide analysis and the development of a proposed strategy:

- Assume extensive education and outreach will be needed in the community to build awareness of the need for action, the urgency of action, and to communicate what individuals can do to make a difference.
- Find ways to help early adopters take action. Programs must be comprehensive and easy to participate in. A good customer experience (including in permitting and utility

upgrade processes) is critical to create positive stories that will encourage others to participate as well.

- Neighborhood-level action should be promoted and rewarded due to the positive cost benefits, and because it is a way to demonstrate how to scale programs up.
- Demonstrate care for small businesses, renters, and low-income residents, finding ways to make participation easier, minimizing impacts, and providing financial incentives where needed.
- Seek ways to leverage outside funding to expand the City's impact once momentum builds.
- Partner with major employers to reduce emissions in ways that align with corporate sustainability goals.
- Only when the community is ready should these efforts be fully scaled up using mandates, carbon pricing, or other systemic tools that may require voter approval. But the City should act with the intent of making the community ready as soon as possible, preferably in the 2022 to 2024 time period.
- To give the community confidence, before going to scale, clear, documented strategies are needed for staffing to handle large numbers of building projects, the utility physical and financial adaptation needed, rate impacts and affordability, resiliency needs, and other indirect impacts.

Staff is developing the following work products to enable Council policy discussion and decisions:

- A 2019 GHG inventory and Business as Usual Forecast to show how much GHG reduction will be achieved if we only implement policies and plans that Council has already adopted and follow California-wide goals and regulations.
- A policy framework to identify the different ways emissions reductions might proceed under different implementation plans, how those scenarios relate to the emissions reductions needed to hold global warming to 1.5°C (3.7°F), and the costs associated with achieving the goals in different ways, including the costs of inaction or delayed action.
- An assessment of the co-benefits of the various S/CAP strategies.
- A detailed assessment by sector of the building and vehicle transformations needed to achieve the goals and the costs of those transformations. Also included are the potential policy tools that could be used to achieve these transformations and the limitations of the tools available to effect change in some sectors.
- A preliminary assessment of the various financing tools available for making the costs of the S/CAP more manageable.

Timeline

The current estimated timeline for release of the S/CAP update is as follows:

- April 2021: Climate Change Work Plan and Earth Day Report Study Session with the results of the 2019 greenhouse gas inventory and Business as Usual Forecast
- May 2021: Council study session on high-level results of technical analysis of the goals and key actions needed to meet the 80 x 30 goal

- April / May 2021: Public engagement begins on topics discussed with Council
- Spring 2021: Detailed results of technical analysis completed, including the costs and efficacy of goals and key actions proposed to achieve the 80 x 30 goal. Hearings at boards and commissions will take place along with public outreach events.
- Summer 2021: S/CAP presented to Council for acceptance
- By December 2021: California Environmental Quality Act (CEQA) evaluation completed
- By December 2021: S/CAP with CEQA Review presented to Council for approval

Stakeholder Engagement

Staff has pursued a 2021 S/CAP engagement plan which identifies relevant stakeholders, proposed materials, and desired meeting milestones and outcomes. Key steps to date have been a March 31 – April 14, 2020 Community Engagement Virtual Workshop; Council Study Sessions on April 13, 2020 and June 16, 2020; a Utilities Advisory Commission Study Session on May 20, 2020; June 2020 Study sessions with the Utilities Advisory Commission, Planning and Transportation Commission, and Parks and Recreation Commission; and a Fall 2020 S/CAP Webinar series to highlight various topics addressed in the 2021 S/CAP. Topics covered in the Fall 2020 S/CAP Webinar series included: an overview of the Sustainability and Climate Action Plan, Sea Level Rise, All-Electric Homes, Transportation, and the Natural Environment. The webinar recordings, PowerPoint presentations, and questions and answers can be found on the [S/CAP Website](#)¹⁴. The webinars were generally well received, with an average of 90 participants at each webinar. Many participants responded to the webinar surveys. The following are some examples of ideas supported by survey respondents:

- Further exploration of a carbon fund, carbon “savings account”, or vehicle miles travelled (VMT) bank to reduce greenhouse gas emissions
- A ballot measure at some point in the future that raises funds from the community in order to reduce greenhouse gas emissions
- Rebates for electric panel upgrade and electric conduit installation, and a special electric rate for all-electric homes
- A special electricity rate for EVs that would help their decision to switch to an EV
- Participants indicated that working from home; better access, efficiency, and reliability of public transit; closer proximity to amenities (e.g. grocery stores); and safer bike routes would motivate them to drive less.

Policy Implications

The 2021 S/CAP aligns with the following Council Priority for CY 2021: “Climate Change – Protection and Adaptation.” The 2021 S/CAP implements the policy objectives of the 2016 S/CAP goal to achieve 80% reductions to emissions by 2030 and the following Comprehensive Plan Implementation Plan Goals:

- Land Use Element

¹⁴

https://www.cityofpaloalto.org/services/sustainability/sustainability_and_climate_action_plan/community_engagement/default.asp

- Goal L-2: An enhanced sense of “community” with development designed to foster public life, meet citywide needs and embrace the principles of sustainability.
- Goal L-4: Inviting pedestrian scale centers that offer a variety of retail and commercial services and provide focal points and community gathering places for the city’s residential neighborhoods and employment districts.
- Transportation Element
 - Goal T-1: Create a sustainable transportation system, complemented by a mix of land uses, that emphasizes walking, bicycling, use of public transportation, and other methods to reduce greenhouse gas emissions and the use of single occupancy motor vehicles.
 - Goal T-2: Decrease delay, congestion, and vehicle miles travelled with a priority on our worst intersections and our peak commute times, including school traffic.
 - Goal T-3: Maintain an efficient roadway network for all users.
 - Goal T-5: Encourage attractive, convenient, efficient and innovative parking solutions for all users.
 - Goal T-6: Provide a safe environment for motorists, pedestrians, and bicyclists on Palo Alto streets.
 - Goal T-8: Influence the shape and implementation of regional transportation policies and technologies to reduce traffic congestion and greenhouse gas emissions.
- Natural Environment
 - Goal N-2: A thriving urban forest that provides public health, ecological, economic, and aesthetic benefits for Palo Alto.
 - Goal N-4: Water resources and infrastructure that are managed to sustain plant and animal life, support urban activities, and protect public health and safety.
 - Goal N-7: A clean, efficient energy supply that makes use of cost-effective renewable resources.
 - Goal N-8: Actively support regional efforts to reduce our contribution to climate change while adapting to the effects of climate change on land uses and city services.
- Safety Element
 - Goal S-3: An environment free of the damaging effects of human-caused threats and hazardous materials.

Resource Impact

Funding has been appropriated as part of the FY 2021 Operating Budget in the Office of Sustainability in the Public Works Department, and in the Office of Transportation in the City Manager’s Office to develop the 2021 S/CAP with the assistance from [AECOM Technical Services, Inc.](#)¹⁵. The contract with AECOM was approved on February 24, 2020 for Professional

¹⁵ <https://www.cityofpaloalto.org/civicax/filebank/documents/75333>

Services Related to the Sustainability and Climate Action Plan Update and SB743 Implementation.

Environmental Review

This status update is not a project under Section 21065 for purposes of the California Environmental Quality Act (CEQA). The final 2021 S/CAP will be evaluated consistent with CEQA prior to approval by the City.