



CITY OF SAN MATEO

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Administrative Report

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TO: Sustainability and Infrastructure Commission

FROM: Kathy Kleinbaum, Deputy City Manager

PREPARED BY: Andrea Chow, Sustainability Analyst

MEETING DATE: Wednesday, January 09, 2019

SUBJECT:
Climate Action Plan and Greenhouse Gas Emission Inventories Update

RECOMMENDATION

Receive an informational report on the update of the Climate Action Plan and Greenhouse Gas Emissions Inventories.

BACKGROUND

The City of San Mateo adopted a Climate Action Plan (CAP) in April 2015 which provides a comprehensive strategy to reduce community-wide greenhouse gas (GHG) emissions in San Mateo. The CAP identified GHG emissions reduction measures and implementation strategies for the City to achieve the State-recommended GHG emissions reduction target of 15% below 2005 levels (or a return to 1990 levels) by 2020 as established in Assembly Bill 32.

Since the adoption of the CAP, a number of recommended strategies in the plan have been completed, including the highest impact strategy, joining Peninsula Clean Energy, a Community Choice Energy program. Additionally, the State adopted Senate Bill 32, which established a revised statewide GHG emission reduction target of 40% below 1990 levels by 2030. This ambitious target is a substantial increase over the City's adopted 2030 target established in the existing CAP.

Staff is preparing an update to the CAP to assess the City's progress thus far and will identify new GHG emissions reduction measures to meet the new statewide 2030 targets and demonstrate the City's continuing leadership in sustainability.

CAP Progress to Date

The 2015 adopted CAP includes 28 implementation measures organized by category including, energy efficiency, renewable energy, alternative transportation and fuels, solid waste, wastewater, and off-road equipment. Each measure has a list of recommended actions that represents suggested means of achieving the measure, but it is not a prescriptive path for implementation. Since the adoption of the CAP, staff has prepared annual qualitative reports on the progress to date on each of the measures. The last annual [report <https://www.cityofsanmateo.org/DocumentCenter/View/65423/Attachment---2018-Climate-Action-Plan-Update?bidId=>](https://www.cityofsanmateo.org/DocumentCenter/View/65423/Attachment---2018-Climate-Action-Plan-Update?bidId=) which was presented at the April 12, 2018 Sustainability Commission meeting and the June 18, 2018 City Council meeting. To date, progress has been made on 24 of the 28 measures in the CAP.

Some key highlights of the work completed are as follows:

- The City became a member of the Joint Powers Authority for the Peninsula Clean Energy (PCE) community choice aggregation program that launched in Fall 2016. By May 2017, PCE became the default electricity provider for all of San Mateo County. In addition, the City opted-up to the PCE 100% renewable energy option ECO100 for all municipal accounts.
- The City adopted ordinances amending the Energy Code and Green Building chapters of the Building Code to require more stringent and sustainable measures in new development. The City requires the installation of a solar

energy systems and requires a higher percentage of electric vehicle readiness for all new construction.

- The City has supported alternative transportation with a bike share program and car share program and piloted a carpool incentive program with Scoop to encourage carpooling.
- The City has installed 18 publicly accessible electric vehicle charging ports, including two DC fast chargers.
- The City has undertaken major municipal energy efficiency improvements including, switching over the majority of streetlights to LED bulbs and is in the process of completing energy efficiency retrofits of most municipal buildings.

Overall, the City has made great strides in implementation of the CAP. The CAP update will quantify this progress, assess the City’s progress towards meeting reduction goals, and establish a plan for long-term GHG reductions.

CAP Update Process

In August 2018, the City advertised a Request for Proposals (RFP) for an update to the Climate Action Plan and selected PlaceWorks. PlaceWorks is currently also under contract with the City to complete the General Plan. The CAP update is an independent contract and is managed by a different Principal on the PlaceWorks team than the one working on the General Plan, although there is significant coordination between the two efforts. PlaceWorks subcontracted with DNV GL to provide technical assistance with the analysis and update of the GHG emission inventories and the update of GHG reduction measures for the energy sector. The County of San Mateo has contracted with DNV GL since 2010 to prepare GHG emissions inventories for San Mateo County jurisdictions.

The contract for the CAP update includes the following key tasks:

- Analyze existing GHG emission inventories and prepare a 2017 inventory.
- Recommend GHG reduction targets and forecast GHG emissions out to 2050.
- Quantify existing and planned state, regional, and local GHG reduction strategies.
- Prepare a menu of possible GHG reduction measures for consideration and facilitate community process to narrow down options.
- Develop a GHG reduction forecast for each selected GHG reduction measure.
- Prepare updated CAP and appropriate environmental documents.
- Support staff in adoption of CAP and General Plan amendments.

The project kicked off in October 2018 and the project team aims to have the CAP and General Plan amendments ready for City Council review and adoption in December 2019. The Sustainability and Infrastructure Commission will be the primary advisory body to review and analyze climate action strategies with the project team. Up to five meetings with the Sustainability and Infrastructure Commission have been scoped. Tentative meeting dates and topics are outlined in the table below.

Meeting	Tentative Meeting Date	Tentative Meeting Topic
1	January 9, 2019	Introduce project team, review project scope and timeline, present GHG emissions inventories, and introduce GHG reduction targets
2	March 13, 2019	Present GHG reductions from existing ongoing efforts; Review GHG forecast and reduction target(s) updates and discuss potential GHG reduction measures
3	April 10, 2019	Continue discussion of potential GHG reduction measures
4	July 10, 2019	Present updates on community engagement and finalize GHG reduction measures and implementation program
5	October 9, 2019	Review draft CAP and provide recommendation to City Council

In addition to the work with the Sustainability and Infrastructure Commission, PlaceWorks will facilitate one community workshop that will focus on the review and prioritization of the GHG reduction measures. Since the City is undertaking multiple planning efforts in 2019 (i.e., General Plan update, Bicycle Master Plan update), staff plan to coordinate with other City departments to leverage other outreach events throughout the CAP update process.

Greenhouse Gas Emissions Inventory

A GHG emissions inventory is an essential component of the CAP process. The following provides an overview of what a GHG emissions inventory is and what the project team is developing.

Overview of Community-wide GHG Emissions Inventories

A GHG emissions inventory is a summary of the GHG emissions occurring as a result of activities that take place within the City of San Mateo. The inventory reflects the GHG emissions associated with everyday activities in the community, such as the use of electricity and natural gas in our homes and businesses, the emissions resulting from fossil-fuel dependent vehicles, and waste sent to the landfills, among other activities.

The City's community-wide GHG emissions inventory follows the 2012 U.S. Protocol for Accounting of Community-wide GHG Emissions (U.S. Community Protocol), developed by ICLEI and numerous industry stakeholders. The U.S. Community Protocol sets forth guidelines for emissions accounting across a set of emissions sectors. The community-wide inventory includes emissions from the residential and non-residential energy sector, on-road vehicle trips, the use of off-road equipment and vehicles, solid waste generated by the community and disposed in landfills, wastewater and water treatment and distribution, Caltrain trips, and fossil fuel combustion at stationary sources.

GHG Emission Inventory Update

Different community-wide inventories have been completed for City of San Mateo over the years, utilizing different data sources and assumptions as the industry guidelines and protocols have evolved. In order to have an "apples to apples" comparison of community-wide emissions for the City of San Mateo, the project team are working to align the different methodologies of GHG emission inventories to provide a coherent historical picture for 2005, 2010, 2015 and a new community-wide GHG inventory for 2017.

The project team has assessed the community-wide GHG emission inventories for 2005 (prepared by ICLEI and updated for use in the City's 2015 CAP), for 2010 (prepared as part of the County of San Mateo's efforts and used in the City's 2015 CAP), and for 2015 (also developed by the County). The team has made some adjustments to these inventories, using the same method for all three, to ensure that they are fully comparable to each other and that they are consistent with the best available guidance and best practices. These adjustments improve the quality of the inventories, making them more accurate and useful for climate planning. Future inventories, prepared by the County or another effort, will be able to follow this method, ensuring a consistent approach in future years.

The team is preparing a 2017 inventory using identical methods, which will help measure San Mateo's progress in reducing GHG emissions since the 2015 CAP. 2017 is the most recent year that data is available and will align with the use of the inventory as part of the General Plan update occurring concurrently with the CAP update. DNV GL is leading the data collection and alignment of inventory workbooks. The most significant methodological change is utilizing an origin-destination methodology for transportation vehicle miles travelled based on MTC data. The City of San Mateo was previously utilizing an in-boundary methodology that included pass-through travel on state highways based on Caltrans data.

Due to the timing of the holidays, the project team is unable to provide the GHG emission inventory results in advance of the Commission meeting. At the Commission meeting, the project team will present the 2017 GHG emission inventory results to demonstrate the City's progress in implementation of the 2015 CAP. The team will also provide adjusted 2005, 2010, and 2015 inventories for comparison. The GHG emission inventory results will help the City strategically plan how to meet the State's goals for reducing GHG emissions 40 percent below 1990 levels by 2030. The data will be made available to the Commission and the public after the meeting on the City's [website page <https://www.cityofsanmateo.org/2769/Climate-Action-Plan>](https://www.cityofsanmateo.org/2769/Climate-Action-Plan) for the CAP.

BUDGET IMPACT

Sufficient funding for the Climate Action Plan Update was budgeted in the Construction Services Fund as part of the 2018-2020 Business Plan.

ENVIRONMENTAL DETERMINATION

In accordance with CEQA Guidelines section 15378(b)(5), receipt of information is not subject to CEQA because it is an administrative activity of government that will not result in physical changes to the environment. An environmental review of the subsequent Climate Action Plan document will be conducted and is included in the overall project scope.

NOTICE PROVIDED

All meeting noticing requirements were met.

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